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THE AMERICAN RAILROAD PROBLEM



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THE AMERICAN RAILROAD PROBLEM

A STUDY IN WAR AND RECONSTRUCTION

BY

I. LEO SHARFMAN

Professor of Economics, University of Michigan



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To

F. W. TAUSSIG

KEEN STUDENT, INSPIRING TEACHER
FAR-SIGHTED AND JUDICIOUS ANALYST
OF ECONOMIC FACTS AND PUBLIC PROBLEMS



PREFACE

THE object of this book is to provide for the intelligent citizen—including the large inarticulate public, as well as the student, the publicist, the legislator, the business man, the shipper, and the railroad security holder, executive, and employee—an analysis of the American railroad problem as it presents itself to-day. Of all the great current social and economic questions, it is doubtful whether any domestic problem is as significant or far-reaching, from the standpoint of the general welfare, as the problem of the railroads. Not only is every citizen vitally concerned in its satisfactory adjustment, but the degree of success which crowns the joint efforts of private enterprise and government activity in its solution will constitute the most convincing test of the efficacy of our democratic institutions in meeting the dominant tasks of this generation. At every point, therefore, the essential issues must be conceived in terms of their public bearing, and each measure designed to adjust conflicting claims must be assessed with reference to the common good. A great complexity of interests is involved. Even when reduced to most general categories, they comprehend those of the users of the transportation service, of the owners of the railroad properties, and of the employees engaged in the performance of transportation tasks. While each of these interests must be adequately safeguarded, the public stake in the proper functioning of the transportation industry transcends them all. "Justice," once wrote Dean Roscoe Pound, "is the ideal compromise between the activities of each and the activities of all in a crowded world." A just solution of the railroad problem involves a nice balancing of



all legitimate interests, rather than the mere recognition of diverse interests, each entitled to prosecute its own ends with equal freedom—the virtual acceptance of the Spencerian formula of "the liberty of each limited only by the like liberties of all." The railroad problem must be treated in its every aspect as a public problem.

The difficulties involved in this problem are neither new nor transient. From the very beginning of railroad transportation in the United States the American people have found themselves compelled to adopt a distinct public attitude toward the railroads. This attitude has varied, in different periods and with reference to different elements of the problem, from a policy of helpfulness to one of repressive regulation; but the necessity of intimate public concern in the status of the railroads has always been recognized. It is impossible to understand the post-war railroad situation without an understanding of its historical antecedents. Recent railroad experience, particularly since the outbreak of the Great War, is deserving of special consideration. Transportation difficulties were dramatically accentuated by the imposition of extraordinary war burdens upon the carriers; and the war-time administration of the railroads, both through voluntary private coöperation and through Federal Control, involved many striking departures from traditional methods, in operating practice as well as in public policy. A just evaluation of the significance of the war period necessitates an impartial consideration of the outstanding facts of the experience. The current interpretations which are based upon *a priori* dogmas, whether prejudicial to the efficacy of private enterprise or of governmental effort, must yield to the reasoned conclusions which spring from objective investigation and rational analysis. Only through such an approach can the essentials of constructive policy be soundly determined, and the adequacy and permanence of the existing railroad adjustment intelligently appraised. It is to be recognized, finally, that the problem of railroad relationships is a highly complex

one, and that no mere social doctrine or simple administrative device can be relied upon to provide an automatic solution. Neither reversion to "the vigorous individualism of the old days," nor acceptance of "the tenets of forward-looking liberalism" can in itself solve the American railroad problem. The relative merits of public operation and private management, and the effectiveness of the traditional regulative approach in matters of service, rates, credit, capitalization, financial return, and labor relationships must receive detailed examination; and the essential facts in each of these fields must be interpreted in the light of the influence of the organic needs of our dynamic industrial institutions, of the inhibitions of the prevailing social psychology, and of the dictates of the dominant political philosophy.

It is a pleasure to record grateful acknowledgment of indebtedness to Mr. H. L. Caverly, my colleague in the Department of Economics at the University of Michigan, for valuable assistance in the preparation of this work. His painstaking and intelligent efforts have contributed substantially to whatever merit this study may possess.

I. L. S.

Ann Arbor, May 16, 1921.



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INTRODUCTION



THE AMERICAN RAILROAD PROBLEM

CHAPTER I

RECONSTRUCTION AND THE RAILROADS

The Great War marks the beginning of an important epoch in the history of American railroads. Whether attention is focused upon the deficiencies of our transportation system under private management and government regulation prior to the war, the unprecedented magnitude of the transportation task during the war period, the heroic efforts of the railroads to meet the war crisis through voluntary coöperation, the aims and achievements of Federal Control, the wide-spread discussion of railroad reconstruction policies during the year following the armistice, or upon the character of the actual railroad adjustment resulting from the Transportation Act of 1920—whatever phase of the problem arrests primary interest—American railroad experience since 1914 presents a striking and stimulating chapter in the economic history of this country. There has been an intimate reciprocal relationship between the war and the railroads. The railroads rendered an indispensable service in the prosecution of the war; and the war exerted a vital influence upon the internal organization and management of the railroads and upon their relationship to the community. Since 1914 our system of railroad transportation has been subjected to many forces and has absorbed many elements calculated to transform both its operating structure and its public status.

We had more than two years of experience with public

operation, through the Federal Government, of our privately owned railroad net. On December 26, 1917, President Wilson, by public proclamation, "took possession and assumed control" of practically the entire transportation system of the United States. This assumption of Federal Control was rendered imperative because of the great burdens placed upon the roads as a result of our participation in the war, and because of the apparent inability of the carriers, even under a régime of extensive voluntary coöperation, to bear these burdens adequately. The policy of public operation was explicitly adopted as a war measure. The Act of March 21, 1918, under the provisions of which the railroads were operated during the twenty-six months of Federal Control, was "expressly declared to be emergency legislation enacted to meet conditions growing out of the war." By the terms of this Act, Federal Control was to terminate within twenty-one months after the conclusion of peace.

In fact, however, the roads were returned to their owners prior to the formal proclamation of peace between the United States and the Central Powers. As early as May 20, 1919, President Wilson, in his message to Congress, announced that "the railroads will be returned to their owners at the end of the calendar year." By that time it was expected that our military establishment would be completely demobilized, and that for most practical purposes, at least as far as transportation needs were concerned, the United States would be on a peace footing. This decision was reached by the President in spite of the recommendation of both Director-General McAdoo and Director-General Hines that Federal Control be extended for a period of five years—to January 1, 1924—in order that government operation might be tested under normal peace conditions, and in order that sufficient time might be available for the enactment of constructive railroad legislation. The weight of public opinion was opposed to the continuation of Federal Control, and the President's announcement received general approval.

But the impending termination of Federal Control necessitated far-reaching legislative action. The task of formulating such legislation—involving not merely the creation, if possible, of a national transportation system, but a difficult adjustment between private rights and public interest—proved more formidable than was anticipated. The return of the roads was therefore postponed to March 1, 1920. In the meantime the many plans for solving the railroad problem that had emerged from prolonged Congressional hearings, sustained public discussion, and numerous legislative bills, took definite shape in the Esch-Cummins Act, which became law, through the President's signature, on February 28, 1920. This Transportation Act of 1920, together with the original Act to Regulate Commerce and its supplements and amendments, as applied by the Interstate Commerce Commission and as interpreted by the courts, constitutes the basis and general framework of our present system of government regulation of railroads under private ownership and operation.

Federal railroad control came to an end March 1, 1920. The twenty-six months of its duration provides an interesting period for intensive study. Its primary significance lies in the aims and achievements of Federal Control as a war measure. To an incomparably larger extent than in any armed conflict of modern times, victory or defeat in the Great War was dependent upon the fullest mobilization of economic resources and their effective application to military ends. In our present industrial society, with its specialization of function and minute subdivision of tasks, with its machine process and large-scale enterprise, with its localization of industry and territorial division of labor, the provision and maintenance of adequate transportation service and facilities, operated efficiently and adjusted to the demands of public welfare, constitute an indispensable condition for the successful functioning of the productive process. The economic tasks of the war, therefore, were inextricably merged with the problem of securing effective results in the transportation industry; and the Government's

administration of the railroads became one of the most important of its war activities. The history of the American war effort cannot be written adequately without a careful examination of the character of the task which confronted the railroads, and of the intelligence and effectiveness with which this task was met under Federal Control. While we are too near the great events to have the necessary perspective for definitive judgment as to the success or failure of the undertaking—or, what is more difficult, for evaluating with confidence the various aspects of the government effort—the actual experience has been concluded and the immediate results are available. A general survey of the aims and achievements of the United States Railroad Administration may well be made. We can describe the nature of the emergency that led to government operation of the railroads, discover the more fundamental causes of Federal Control, disclose the dominant purposes of the Railroad Administration, trace the development of the machinery of government control, and analyze the results of the undertaking. From such a survey the great significance of Federal Control as a war measure will readily appear.

But our war experience with government railroad operation is not an isolated episode in American railroad history. Its roots must be found in the system of private management and public regulation prior to 1914. Its effects are reflected in the nature of the present readjustment of the relationship between the railroads and the public. Both the pre-war status of the railroads and their war administration have projected themselves, through their defects as well as their merits, into the formulation of future railroad policy. They constitute the effective cause and the immediate basis of the reorganization of the American system of railroad regulation incorporated in the Transportation Act of 1920. Moreover, this reorganization is but one aspect of the reconstructive process through which our entire economic structure and relationships are now passing. It is but one element in the larger program of economic reconstruction.

War and reconstruction are inseparable. The conclusion of every great war marks the beginning of a period of reconstruction. The chief justification of the recent world struggle, in the eyes of the large mass of mankind, must be found in the new world order which was to emerge from the triumph of democratic ideals. The current readjustments in economic and political relationships, however inadequate they may prove to be, because of the persistent domination of established power and the continued subordination of legitimate interests, must none the less be viewed from the standpoint of fundamental purposes, and must be tested by the needs of a dynamic, complex, highly industrialized society. The world is weary of war and chaos; the current yearning for peace and stability is widespread and deep-rooted. Makeshift and compromise may be the inevitable tools of the immediate present; but the hope of more fundamental change, and even the willingness to struggle for its attainment through sacrifice, are not entirely submerged. Every important program of international reorganization and of domestic readjustment, however feeble in its inception, must be conceived in the light of irresistible reconstructive processes.

The attention of the world has been centered primarily upon political reconstruction. Problems of international reorganization received foremost consideration both in the course of the war and in the negotiations for peace. The establishment of new European states and the fate of the League of Nations, because they formed the chief subject-matter of the formal settlement and because they served, dramatically, as concrete evidences of the new world order, gripped the minds of men so completely that the concept of reconstruction, in many quarters, was confined within the limits of a very narrow horizon. The new nationalism and the new internationalism, subtly and sometimes paradoxically wedded, came to be the twin goal of aspiration and effort.

But political reconstruction cannot be divorced from economic reconstruction. Every international conflict, because it is a struggle between states, assumes a predominantly political

aspect, and the territorial and governmental readjustments which generally follow come to be looked upon as the distinctive fruits of the struggle. But one need not be steeped in the faith of economic determinism to perceive the large influence of economic rivalries upon modern war. The Great War can certainly be traced, in large measure, to economic causes; and the economic and financial provisions of the Treaty of Peace are among the most important and most controversial elements of the settlement. However unwise these economic arrangements may appear, they disclose clearly that the necessity of some sort of economic reconstruction as a basis of future world development was keenly appreciated by those charged with the task of rehabilitating the shattered structure of European civilization.

But international economic readjustment was largely dependent upon economic reconstruction in the domestic affairs of the great powers. A surging unrest among the world masses was groping for articulation. In eastern Europe, and particularly in Russia, political revolution was accompanied by an industrial philosophy and an upheaval in economic relations threatening the very foundations of modern capitalism. The spread of bolshevistic doctrine and the growing strength of communist opinion loomed as a real menace in every capital of Europe; and even America was not free from these influences, nor from the fear of their consequences. Economic reconstruction came to be regarded as a necessary means of safeguarding the essential institutions of the established world order, no less than as an aspiration of a reawakened public conscience. The elimination of political autocracy would constitute but a partial basis for durable peace and for the triumph of democratic ideals; the extension and purification of political democracy must be accompanied by the establishment of industrial democracy. So ran a substantial, if not a dominant, current of public opinion as the statesmen of the world set their energies to the task of formulating the peace settlement. As a result, these aspirations were foreshadowed in scattering pro-

visions of the treaty, and more especially in the labor sections of the Covenant of the League of Nations.

But in a world dominated in its institutional arrangements and in its intellectual outlook by the conception of national sovereignty, in spite of its striving for international coöperation, social and economic reform must necessarily be initiated and developed, both as to goal and as to machinery for enforcement, by the mandates of the domestic forum and by the functioning of established governmental agencies in the various states. The scope and character of the reconstructive process, in its economic aspects, can be gathered chiefly, therefore, through an examination of concrete measures of domestic policy. Our task is limited, in these pages, to the situation in the United States; it is limited, further, to one aspect of economic reconstruction. We seek to examine the relationship of the so-called railroad problem in the United States to the larger program of economic reorganization, to analyze the essential elements of sound reconstructive policy with regard to the railroads, and to discover how far the actual current railroad adjustments fulfil American needs.

It is a commonplace that the problem of reconstruction involves two distinct tasks—one, tangible and material; the other, somewhat intangible and dealing with social and economic relationships. In its primary sense, reconstruction suggests physical restoration. War is a destructive enterprise; it leads to devastation. Homes are razed, factories are shattered, agricultural lands are sown with iron and steel, urban communities are disorganized, railways and bridges are demolished. Destruction of property, as of human life, serves as an effective tool of military effort, and both consumable wealth and productive machinery become substantially depleted. With peace, therefore, must come physical rehabilitation, if the processes of normal life are to be restored. The work of tearing down must be succeeded by the task of building up.

But economic reconstruction possesses a more fundamental significance. It involves social and industrial relationships,

and not merely physical things. It aims to effectuate the newer ideals born of the war or emphasized by the struggle. It seeks so to reconstitute the foundations of our social and economic order as to realize the promise of democracy. This aspect of reconstruction involves a determination of the future structure of organized society, particularly with respect to its economic arrangements. It does not, however, necessarily lead to revolutionary change or radical readjustment. The machinery of social control is but a means to an end, and not an end in itself. Whether, for example, modern capitalism in its essential character shall be allowed to persist in the new world is largely a question of judgment and expediency, based upon a recognition of the present state of human progress and upon an intelligent understanding of the historical development of our industrial institutions. But it is a cardinal purpose of sound reconstructive policy to cleanse the community of the many excrescences arising out of the rapid growth of modern capitalism. In like manner, every measure of social or economic reform, however controversial the question as to the expediency of its adoption, must be directed to the fulfilment of the prevailing aspirations of society as a whole; but their adequacy as mere devices or arrangements or machinery of social control will depend upon the dictates of practical insight and human experience. Thus the continuation of the fundamental institutions of private property and freedom of contract is not necessarily antagonistic to the adoption of a most vigorous policy of economic reconstruction; provided private property and freedom of contract are regarded as mere tools for the attainment of social welfare, and not as "natural" rights so sanctified by usage as to be immune to the modifications of a dynamic world. As tools of social control they may be so molded as to achieve the goal of democratic aspiration; and so conceived, their preservation—in their essential characteristics, and not with their fortuitous and historical qualities—commands the approval of the dominant judgment of liberal thought. It is the acceptance of these institutions as ends in themselves, and

therefore presumptively exempt from limitation or restriction, that makes for the ruthless disregard of the demands of a changing social order. The individualistic philosophy of the eighteenth century cannot be harmonized with the socialized thought of the twentieth century. And the Great War has accentuated the established trend toward the socialization of human relationships and of the legal framework by which the practical consequences of these relationships are so largely determined.

Economic reconstruction as such, therefore, must first be conceived in terms of function and not of concrete policy. We may then address ourselves to a determination of the essential elements of reconstructive policy in the particular field of our special interest. In this second stage the task becomes an eminently practical one. It involves an analysis of principles and an evaluation of concrete measures. It leads to the formulation of a program and the execution of its terms. Such is the process in the actual development of each aspect of economic reconstruction. We are concerned with the problem of railroad transportation, and we shall proceed to examine the relationship between economic reconstruction and the railroads.

Upon the termination of Federal Control, American railroads were confronted, in the first place, with the task of physical "reconstruction." Although the United States escaped from the actual destruction to which the chief belligerent countries of Europe had been subjected, the need for such "reconstruction" was none the less real and urgent. It did not involve the necessity of rebuilding or replacing the transportation system in any substantial measure—providing new road-beds, new tracks, new stations, and new equipment in lieu of the facilities that had been demolished in actual warfare or surrendered by way of reparation—but it did manifest itself in a wide-spread demand for such development of the mechanism of the railroad as would enable our transportation system to function effec-

tively in carrying the traffic burden of the American industrial structure.

For about two decades before the outbreak of the Great War this traffic burden had been steadily outstripping the growth of railroad plant and equipment; and this situation was further aggravated by the exigencies of war conditions. Many factors contributed to the result. The current physical inadequacy of our railroad system can be traced to the misdeeds of the railroads themselves, to the defects of the system of railroad regulation, to the extraordinary strain of war operation. The impairment of railway credit is generally cited as the fundamental cause; but the difficulty of attracting an adequate flow of capital into the railroad industry is itself a consequence both of financial looseness on the part of many of the railroad corporations and of unduly restrictive rate policies on the part of the regulatory agencies. The intensive utilization of railroad equipment and facilities in the course of the war, with its inevitable accompaniment of neglected maintenance and renewals, and the almost insuperable obstacles to expansion of railroad plant under the pressure of war activity, further accentuated the inability of the roads to render adequate transportation service, and emphasized the necessity of large increases in railroad capital investment. As a result, then, both of pre-war conditions and of the war experience, the initial task that faced the railroads upon their return to private operation was the problem of constructing new mileage, providing additional trackage, increasing rolling-stock, improving terminal facilities. Economic reconstruction in its primary sense, as applied to the railroads, manifested itself in extensive physical and financial needs.

A brief recital of a few striking facts will indicate the basis of these needs. During the two decades preceding the war period, the American industrial structure expanded very rapidly. A clear index of this expansion can be found in the growth of railroad traffic. In 1895 the total ton mileage of revenue freight hauled by American railroads was 85.2 bil-

lions; by 1905 this ton mileage had grown to 186.5 billions, an increase of approximately 118 per cent. Between 1906 and 1916 there was an additional increase in freight traffic of about 60 per cent., the ton mileage mounting from 215.9 billions in 1906 to 343.4 billions for the fiscal year 1916. The growth of passenger mileage, while less important perhaps, was equally striking. Between 1895 and 1905 the increase was more than 95 per cent., rising from 12.2 billions to 23.8 billions; and between 1906 and 1916 there was an additional increase of over 35 per cent. in passenger traffic, the mileage reaching 34.3 billions in 1916, as compared with 25.2 billions in 1906. Then came the intensive pressure of the war period, and unprecedented peak loads were imposed upon the railroad net. The growth of freight traffic was reflected in a ton mileage of 398.2 billions in 1917, 403.7 billions in 1918, and 362.9 billions in 1919—a substantial increase, in each of these years, over every previous high-water mark. And because of the heavy demand upon railroad service for troop movements, the increase in passenger traffic during the war period was even more rapid. The high passenger mileage of 1916 rose to 40.1 billions in 1917, to 43.2 billions in 1918, and to 46.2 billions in 1919. How far did the development of railroad plant and equipment keep pace with this traffic expansion?

The growth of railroad mileage constitutes an important measure of expansion of railroad plant. Between 1895 and 1905 the increase of 118 per cent. in ton mileage and of 95 per cent. in passenger mileage was accompanied by an increase of but 21 per cent. in the number of miles of railroad line; between 1906 and 1916 the increase in railroad mileage was but 16 per cent., as compared with the increase of 60 per cent. in ton mileage and of 35 per cent. in passenger mileage. During the year 1916, with a 35 per cent. increase in ton mileage over the preceding year, only 1,098 miles of new line were built. If deductions are made for abandoned plant, the disproportion between the growth of traffic and the growth of mileage becomes even more significant. For the year 1916, just cited,

the net increase in mileage was but 426. This neglect of new construction was accentuated during the war period. In spite of the enormous traffic burden resulting from the war emergency, there was an actual net decrease in railroad mileage during each of the years 1917, 1918, and 1919. The total new mileage constructed during these three years was 2,386; in the same period 3,319 miles of line were abandoned, resulting in an aggregate net decrease of 933 in railroad mileage. Nor has the growth of equipment kept pace with the expansion of traffic. Between 1906 and 1916 the number of locomotives was increased by 24 per cent., the number of freight-cars by 26 per cent., and the number of passenger-cars by 29 per cent. This increase, as we noted above, was outstripped decisively by the growth of traffic. And during the war period the provision of new equipment was further neglected in large measure. In 1917 the number of locomotives, freight-cars, and passenger coaches available for railroad service was actually smaller than in the preceding year; and the additions to railroad equipment provided during Federal Control, though substantial in themselves, fell far short of meeting the urgent traffic needs.

The facts as to capital investment provide confirmation of this growing discrepancy between extent of traffic and magnitude of plant and equipment. In 1906 the late James J. Hill testified before the Interstate Commerce Commission that lack of transportation facilities constituted the most fundamental obstacle to American commercial expansion, and that the proper functioning of industry was being hampered very seriously by inadequacy of railroad plant and equipment. He estimated that an investment of at least $5,500,000,000 would be necessary during the following five-year period in order to render our transportation systems capable of absorbing effectively the normal flow of railroad traffic. This estimate was regarded at the time as both reasonable and conservative. It was confirmed by the testimony of other railroad men of high standing and wide experience. Yet an entire decade elapsed before an

amount of new capital was attracted into the railroad industry equal in the aggregate to approximately this sum of five and a half billions of dollars. And during the period of Federal Control, in spite of the unparalleled increase in the transportation burden and the sharp decline in the value of money, the average annual amount of new capital invested in additions and betterments, including equipment, provided by the Railroad Administration and raised by the carriers themselves, did not exceed substantially the inadequate average annual capital expenditures of the preceding decade of impaired railroad credit.

The extent of the needs of the railroads cannot be stated dogmatically nor with mathematical precision. Both the physical needs and their financial measure are dependent upon contingencies incapable of confident prediction. The amount of new mileage and increased trackage, the number of additional locomotives, freight-cars, and passenger-cars, the expansion of shops, engine-houses, and terminal facilities can be determined only on the basis of future needs as well as of past deficiencies. These future needs are in turn dependent primarily upon the course and efficiency of the productive process during the crucial years of the impending economic readjustment. The uncertainties of the industrial situation render resort to prediction with regard to the national output a hazardous undertaking. Moreover, the future course of commodity prices and the probable status of the wage level are clouded in equal uncertainty, which renders the task of translating physical into financial needs well-nigh impossible. Mere estimates must necessarily be relied upon, even if they be intelligent estimates, made by men experienced in the character of American railroads and their relationship to commercial and industrial progress. These estimates cannot escape the influence of arbitrary assumptions.

But such estimates have come from many sources in the course of the transitional period ushered in by the experiment of Federal Control. There is a wide latitude in the conclusions reached. The absolute figures possess no essential significance

at this stage of our analysis. It is of importance to note only this: that there is universal agreement that the existing railroad structure is distinctly inadequate and that vast capital expenditures are necessary. Merely by way of illustration, it may be interesting to observe that one of the most careful of these estimates placed the financial needs of the railroads for the years 1920, 1921, and 1922 in excess of six billions of dollars.[1] This estimated capital expenditure for the three-year period made provision, among other things, for 6,000 miles of new line, for 15,000 miles of multiple main track, for 30,000 miles of side and yard tracks, for 10,850 miles of automatic block signals, for 13,177 locomotives, for 24,500 passenger-train cars, and for 712,400 freight-cars. It should be noted that these provisions look primarily to the intensive development of the railroad service rather than to an extensive program of railroad expansion.

But the problem of reconstruction and the railroads does not concern itself solely with physical and financial needs. Not only does the rehabilitation of railroad credit, upon which the satisfaction of these needs must ultimately depend, necessitate a readjustment of the public status of the transportation industry, but the character and significance of the transportation

[1] *Railway Age*, January 2, 1920. This entire issue is devoted to an analysis and estimate of the physical and financial needs of the railroads. Each of the items in the proposed budget is given separate and detailed consideration. The following table summarizes the estimates for each of the various items:

Additional main track	$1,250,000,000
Grade revision, cut-offs, elimination of curvature, etc.	600,000,000
Engine-houses and shops	250,000,000
Station buildings	300,000,000
Extensions	600,000,000
Signals	52,264,000
Freight cars	1,662,000,000
Passenger cars	532,000,000
Shop equipment	61,230,000
Locomotives	702,786,000
Total	$6,010,280,000

function demand such a reconstitution of the relationship between the private owners of the railroad properties and the public users of the railroad service as will reflect concretely the prevailing ideals and aspirations of the American community.

The railroad industry is conspicuously adapted to the application of the reconstructive process. It is the most important of all modern industries. At the outbreak of the war, railroad enterprise was probably second only to agriculture in extent of physical properties, in amount of capital investment, in its direct and indirect utilization of the nation's man-power, in the magnitude of its current outlays for operation, in the vastness of the flow of income which its service called into being. Moreover, the service which it renders is foundational in character. Not only does it constitute the most potent single influence toward social and political unity, but it provides the essential substratum of the modern economic structure. Large-scale enterprise, minute division of labor, the machine process, and industrial specialization are all dependent upon extensive markets, and these markets can be made available only through adequate transportation facilities. The cheap transport of raw materials and food products is an indispensable condition for the maintenance and development of modern industrial processes. Our numerous and thriving urban centers draw essential sustenance through these arteries of commercial intercourse, and the thousands of rural communities which still constitute the foundation of our social and economic life can escape isolation, and share in the diversified fruits of coöperative human effort, only through reliance upon these agencies of communication and exchange.

And the exigencies of war have further emphasized the indispensable character of the railroad service. The dictum of Marshal Joffre that the great conflict was a "railway war" was amply confirmed by the outstanding events of the struggle, not only because railway transport made possible the flexible utilization of a threateningly diminishing man-power, but be-

cause the industrial basis of modern warfare was directly dependent upon an adequate supply of transportation service. The effective mobilization of economic resources the world over came to be the prime condition of military success. And the United States, as the chief reservoir of economic power, was called upon, at the critical hour, to make the tangible sinews of war swiftly available. The problem of the railroads at once assumed an overshadowing importance. The wave of patriotic fervor and the spirit of self-sacrifice which gripped the national consciousness upon America's entrance into the world conflict could not be translated into fruitful action and the national will rendered an active factor on the field of battle without material instrumentalities. The railroads proved to be one of the most important of these instrumentalities—the key to America's war effort. As a result of the dramatic opportunity created by the war situation, the significance of the railroad function was impressed upon the public mind more strikingly than could have been possible in any peace eventuality save a complete disruption of the railroad service. Because of the impressive magnitude of the railroad industry, therefore, and because of the extraordinary importance of the transportation service in the organization of modern life—whether in the prosecution of the normal ends of peace or in the achievement of the critical goal of armed conflict—no genuine program of economic reconstruction, at the very threshold of the task, can ignore the compelling demands of the so-called railroad problem.

But more definite and concrete reasons are available for the significance of the railroad problem in post-war readjustments. The wide-spread conflict between capital and labor, the increasingly disruptive maladjustment between employer and employee, probably constitutes the most potent cause of the current unrest and the most distinctive characteristic of the present industrial situation. Both economic stability and industrial progress must wait upon the evolution of a just and reasonably durable settlement of industrial relationships. The problems of wages, hours, and working conditions, of the representation

of labor in the control of industry, of the status and activities of labor organizations, of the use of the strike as a weapon in labor disputes, of the development of agencies of arbitration or conciliation or mediation, can no longer be dismissed as matters for mere private adjustment by the parties immediately involved. The public welfare is intimately and, in many instances, predominantly at stake. The economic cost of the dissipation of productive capacity, and the social inconvenience, often bringing acute suffering in its train, resulting from the disruption of essential services, create a burden that weighs most heavily upon the consuming public. Under prevailing conditions the energies of labor are unduly spent in paralyzing struggle rather than in constructive advancement, and the bitterness of the conflict threatens to jeopardize the very existence of modern capitalism.

It is decidedly questionable whether the ultimate interests of labor would be furthered by the overthrow of the system of private competitive enterprise, and it is reasonably certain that the capitalistic organization of industry cannot be maintained and developed without a greater degree of coöperation between labor and capital than is possible under existing industrial relationships. But the task of evolving a satisfactory solution of the labor problem is an exceedingly difficult one. The historic roots of the wage system and the individualistic temper which has dominated American economic development have rendered difficult the attainment of fundamental change in industrial relationships. Progress toward the amelioration of these relationships has consisted mainly in the elimination of intolerable abuses, in the removal of admittedly over-burdensome restraints, in the establishment, under some conditions of employment, of minimum standards as to wages, hours, and working environment. And even these gains have not received universal recognition. The great diversity in conditions of employment has made uniformity in labor adjustments both impracticable and undesirable, and the isolated progress of par-

ticular groups has failed to exert upon the entire labor situation the constructive influence essential to permanent relief.

Under these circumstances, the solution of the railway labor problem would not only afford a great measure of much-needed improvement in the adjustment of an urgent and long-neglected element in the evolution of the public status of the railroad industry, but it would constitute a contribution of large strategic importance toward the stabilization and just settlement of the general industrial situation.

The labor force directly employed by American railroads is normally in excess of two million men. The railroads' pay-roll which measures the wages paid to this labor force now aggregates annually more than three billions of dollars. This vast army of employees comprehends a great diversity of crafts, ranging from the highly responsible and skilled services of engineers, train-despatchers, telegraphers, and machinists, to the unskilled labor of section men and the more common forms of clerical service. This body of men includes both organized and unorganized labor. The four great brotherhoods, representing the railway conductors, the locomotive engineers, the locomotive firemen and enginemen, and the railway trainmen, constitute a group of highly organized railway employees. In addition there are a number of less closely knit organizations affiliated with the American Federation of Labor. These organizations represent machinists, blacksmiths and helpers, boilermakers, sheet-metal workers, electrical workers, carmen, railway clerks, freight-handlers, station employees, switchmen, railroad telegraphers, maintenance of way employees, and railway shop laborers. Some hundreds of thousands of the unskilled employees are entirely unorganized. All of these wage-earners are engaged in the operation of an industry which directly concerns practically every individual within the country and affects intimately every phase of our national life. Upon the efficiency of this service depends the efficiency of the entire productive process and the development of the American social organism. And the maintenance of the continuity of this

service, which has been frequently threatened with disruption in recent years, transcends in importance every other aspect of the relationship of the railroads to the public.

The railroad problem cannot be solved adequately, therefore, without the adoption of a constructive policy in the settlement of the status of railroad labor. One of the outstanding shortcomings of past efforts in railroad regulation has consisted in the general neglect of this important element in the situation; and it is now well recognized that continued adherence to the conception of the railroad problem as involving merely matters of railroad credit, charges, and financial return will lead to the complete discrediting of the system of private ownership and operation. The question of wages in the railroad industry must hereafter receive equal consideration with that of rates and profits, and the position of railroad employees, because of their distinct and significant interest in the proper functioning of railroad enterprise, must be accorded equal recognition with that of the owners of the railroad properties and the users of the railroad service. But it is apparent, also, that such a constructive solution of the railroad labor problem would exert a powerful influence upon the adjustment of general industrial relationships. The magnitude and diverse character, in skill and organization, of the body of employees represented, the indispensable nature of the service which they render, and the imperative necessity of maintaining an uninterrupted flow of that service give to the railroad labor problem a primary place on the docket of economic reconstruction.

In like manner, the periodic dissatisfaction with the high level of commodity prices and the large accumulation of business profits, and the prevailing desire to secure relief through governmental authority, can find a fruitful basis for constructive action in the establishment of sound principles and effective machinery for the regulation of railway rates and the limitation of railway returns.

The traditional public attitude toward prices and profits in ordinary business enterprise has been largely one of *laissez-*

faire. The force of competition has been confidently relied upon to protect the interests of the consumer. The classical economist found in the competitive principle an effective and sufficient means for the maintenance of "right" price and "the reduction of profits to a minimum." Competitive prices, it was believed, would automatically mold the character and direction of productive activity in accordance with the "real" needs of the community, and the national income, under competition, would be justly distributed among the various factors that contribute to the productive process in accordance with the significance of their respective contributions.

The critical exigencies of the war situation introduced a radical departure from this traditional attitude. The prices of the more essential commodities were subjected to the conscious control of a variety of governmental agencies, and the machinery of taxation was utilized in unusually vigorous fashion to divert to the public treasury a measurable proportion of such "excessive" returns as emerged in spite of the policy of price regulation. With the termination of our actual belligerency price-fixing activities were quickly allowed to lapse. The program of excess profits taxation, though sound in principle as an impost on differential returns, has been subjected to influential and bitter attack, on the conflicting grounds that it imposes a restrictive burden on productive activity and that its incidence is inevitably shifted to the consuming public, and is likely to be repealed. In the meantime the great weight of high living costs, that was not entirely removed even by the sharp business depression that finally ensued late in 1920, was breeding unrest. The sufficiency of the competitive principle under prevailing conditions was being openly and insistently questioned. Many clogs were becoming apparent which operate to undermine that perfect freedom of competition which serves as a fundamental assumption in the analysis of orthodox political economy. The relative immobility of capital under the modern régime of industrial specialization, the highly complex character of the various institutions which must be relied upon to function

harmoniously in our economic society, the great number and variety of the agencies which constitute an integral part of the productive process, the frequent resort to unfair methods of competition, the growing influence of formal and informal coöperation in industry, have rendered so-called competitive prices an insecure basis for the protection of the public interest, and have cast serious and well-merited doubt upon the justice of the results achieved through the prevailing processes of economic distribution. Isolated attacks upon profiteering, it is commonly recognized, are bound to prove futile; for they aim to reach the outward manifestations of the difficulty without removing its causes. In the trend toward economic reconstruction, then, there appeared in the foreground a demand for fundamental change in industrial control. Radical opinion did not shrink from proposals for the nationalization of our more important industries, and the adoption of a permanent policy of price regulation was not without the horizon of those who sought "genuine" reconstruction.

Aside from our brief experiment with governmental control of industrial action under the extraordinary conditions of war, American experience with public regulation can be found chiefly in the field of railroads and other public service industries. In the matter of rates and profits which we have been considering (granting the wisdom of withstanding nationalization even in the railroad industry), much remained to be done to harmonize the conflicting claims of carriers, shippers, and consumers. In spite of the activities of the Interstate Commerce Commission and of the state railroad commissions for many decades, there were still innumerable maladjustments in the rate structure, resulting in unjustifiable discrimination between industries and communities, lack of flexibility in rate schedules, widely divergent views as to principles for determining the investment value of railroad property as a basis for testing the reasonableness of rates and charges, wasteful utilization of transportation facilities because of undue stress upon the individual and competitive activities of the carriers, troublesome

differences in financial return between the so-called strong and weak roads, and a general state of railroad credit which hampered very seriously the development of railroad plant and equipment. An adjustment of these difficulties would tend to reduce the cost of transportation—thereby assisting in the reduction of commodity prices—and it would constitute such a reconstruction of the relationship between the railroads and the public as would reflect in much truer measure than in the past the recognition of the public status of railroad transportation.

There is little danger, moreover, that effective regulation of railroad rates and wise limitation of railroad returns would lead to the ready extension of these policies into the entire field of industrial action. While governmental experience with the railroads would doubtless prove useful in the formulation of the details of the public attitude toward business, it would become readily apparent that the need for railroad regulation arises from the inherently monopolistic character of railroad enterprise, and that the possibility of performing the regulatory function effectively involves the practical acceptance of a very measurable degree of unity of railroad operation. The facts of American economic development clearly justify no such conclusion with regard to the character of industry as a whole. Only the modern abuse of the competitive process, rather than the competitive principle as such, has thus far been discredited.

Finally, the irresistible pressure of events necessitated consideration of reconstructive policy with reference to the railroads. A conjunction of critical circumstances resulted in federal railroad control during the war period. At the end of the emergency period, some decision was inevitable as to what disposition should be made of the railroads by the national government. A permanent policy of public ownership might have been adopted; the experiment of Federal Control might have been continued for a brief period, in order to test its merits under more normal conditions than those of world war; or the roads had to be returned to their owners. Although

public opinion demanded the resumption of private management, the question as to whether private ownership and operation is essentially incapable of promoting the general good called for reëxamination with open mind. Moreover, there was universal agreement that the resumption of private management on the old basis was neither safe nor practicable. The roads faced urgent physical and financial needs; yet their credit position was extremely weak—clearly unequal to the task of physical rehabilitation. Then, the mounting deficits under Federal Control disclosed the inadequacy of the prevailing rate level. Without the assurance of increased revenue, a large proportion of the railroads faced receivership, and their ability to attract capital into the industry promised to be entirely destroyed. Rate advances, on the other hand, foreshadowed a further intensification of the burden of high living costs, and even such advances could serve to reëstablish railroad credit only if granted on the basis of some definite principle of rate-making, newly defined, for the guidance of governmental authority. Furthermore, many demands for railroad wage increases were insistently being pressed. The authority of organized labor was being flaunted by intermittent resort to unauthorized strikes, and the great railroad brotherhoods were clamoring for the adoption of a liberal and concrete policy in definition of the future status of railroad labor. It was obvious, therefore, that the interests of the carriers, of the railway employees, and of the shipping and consuming public alike required the enactment of constructive railroad legislation. The Esch-Cummins Act was the Government's response to this public need.

With the foregoing analysis as a background for our discussion, we shall proceed in the pages that follow to consider in turn the war administration of the railroads, the essentials of reconstructive policy, and the elements of the railroad adjustment. The war administration of the railroads will include a brief résumé of the railroad situation in 1914, an account of private war-time operation, a description of Federal Control,

and an evaluation of its results. The essentials of reconstructive policy will involve a discussion of the question of railroad nationalization, and a consideration of the outstanding problems in railroad regulation—the demands of unity of operation and railroad service; of rates, credit, and financial return; and of railroad labor and continuity of operation. The concluding part of the study, in presenting the elements of the railroad adjustment, will consider the background of the settlement, analyze and describe the essential features of the Transportation Act of 1920, and undertake a judgment as to the adequacy and permanence of the adjustment.



PART I

THE WAR ADMINISTRATION OF THE RAILROADS



CHAPTER II

AMERICAN RAILROADS IN 1914

Economic institutions, like all human arrangements, are the result of historic evolution. Their present character is grounded in past experience, and the direction of their future development is dependent upon their responsiveness to the growing needs of changing social and industrial conditions. The object of economic reform is to conserve the permanent fruits of past achievement, to remove current maladjustments, and to establish flexible arrangements calculated to function effectively in meeting future needs. These needs embrace the establishment of adequate instrumentalities for furthering the productive process and such adjustments between private rights and public interest as reflect the dominant social, political, and economic ideals of the community.

§1. *The Historic Approach and the Railroad Problem*

These considerations are directly applicable to the railroad problem in the United States. The growth of the railroad industry was stimulated by urgent social and industrial needs. The manner of its growth was determined by the pressure of events and the temper of our national ideals. Both the objective facts underlying railroad development and the standards of general welfare determining the public status of the industry have been subject to constant, though gradual, transformation. The meaning and significance of current railroad practices and present-day railroad problems find their source in early conditions and past events. The historical modifications of regulatory purpose and machinery, through the prolific accu-

mulation of legislative enactment, administrative order, and judicial decision, are grounded in changing social and political ideals and expanding commercial and industrial needs. Neither the shortcomings nor the achievements of the railroad industry can be adequately interpreted without the recognition of this constantly changing background.[1]

As a basis, therefore, for a proper understanding of the war problems of the railroads and of the character of their solution, and as a foundation for a satisfactory analysis of the ideal and actual readjustment of the status of railroad transportation in the United States following the war, it is necessary to describe the conditions of American railroad transportation at the outbreak of hostilities in Europe. Consequently, our description and interpretation of the problems, events, policies, and methods which constitute the war administration of the railroads will begin with a recital of the status of American railroads in 1914. This will involve a consideration of the extent and character of physical plant and equipment, of service and operation, and of the principles and machinery of regulation through which the private rights of the carriers and the public interests of the community were harmonized and adjusted.

[1] One of our most distinguished American economists, writing of the speculative character of the beginnings of railroad enterprise, and of the financial abuses that accompanied railroad building and operation during the early days, emphasizes very strikingly the complex of circumstances which inevitably molded the results: "Historically, the course of development seems to have been controlled by a fated destiny. Given the impossibility of public ownership and management (and for the earlier stages of railway development in this country public operation was out of the question); given the eager desire of the community for ways of transportation and its willingness to encourage their construction in every way; given the looseness of corporation laws, the universal speculative temper, the laxness of business standards; given the periodic fluctuations in industry, the economic peculiarities of railways, the opportunities for large-scale returns—and the harvest was prepared for the daring and able operator. Perhaps all the advantages of rapid construction, wide permeation of the land with railway facilities, from competition and consolidation and vigorous management, could have been gotten in some other way; but a train of deep-seated causes seems to have decreed that they should come in just this way and with just these checkered results." F. W. Taussig, *Principles of Economics*, Vol. 2, pp. 393-394.

And since conditions in 1914 were themselves the outgrowth of a great complexity of influences extending over a period of almost a century, it will be necessary to trace briefly the outstanding characteristics of American railway development up to the year 1914. Such an historical résumé will disclose the notable achievements and the fundamental shortcomings which have developed in the establishment of transportation service in the United States.

American railroad transportation may be said to date from 1830. At that time there were but 23 miles of line in this country. Turnpikes and canals were superseded by the railroad as the primary channel of trade and commerce only when the practicability of applying steam to transportation, through the successful use of the locomotive, was definitely established. The substitution of mechanical for muscular power in the carriage of persons and the movement of goods then became a reality. This transformation had its beginning in the United States with the building of the Baltimore and Ohio Railroad. "On the fourth of July, 1828," writes President Hadley, "Charles Carroll, last surviving signer of the Declaration of Independence, laid the first rail of the Baltimore and Ohio Railroad. One man's life formed the connecting link between the political revolution of the last century and the industrial revolution of the present." [2] The beginnings were small. At one time the Charleston and Hamburg Railroad of South Carolina, which by 1834 was operating 137 miles of line, was "the longest line in the world under a single management." And in 1835 the mileage of the Pennsylvania Railroad, though but slightly in excess of 200 miles of road, constituted about one-quarter of the entire American railway net.

In the transition to railroad transportation, as in the establishment of every fundamental economic change, much opposition was encountered. In those days, as under more modern conditions, the vested interests presented claims that had to be reckoned with. The intrusion of railroad competition was

[2] A. T. Hadley, *Railroad Transportation*, p. 1.

resented by private investors in turnpikes and canals, and vigorous protests were made by farmers, tavern-keepers, draymen and others who felt that railway progress would jeopardize their individual rights and opportunities for gain. But the resistance was relatively feeble and short-lived. The superiority of the railroad over the other available transportation agencies was quickly recognized, and the popular demand for railway connections and facilities resulted, after the first decade of railway transportation, in rapid and enthusiastic railroad construction and in wide-spread public support of railroad enterprise.

A general survey of American railway development discloses four fairly distinct periods: from 1830 to 1870; from 1870 to 1887; from 1887 to 1906; and from 1906 to the outbreak of the Great War. Each of these periods was characterized by distinctive developments or advances in the physical growth of railroad plant and equipment, or in the character of railroad organization and operation, or in the adjustment of the public status of the railroad industry.

§2. *The Period of Railroad Freedom*

The first period, from 1830 to 1870, was primarily one of railroad building. During the initial two decades the railroad was still in the stage of experimentation and its service was largely utilized to supplement water transportation. By 1850 there were only about 9,000 miles of line in the United States. This railway plant was localized in the seaboard states, especially in New England. Most of the important lines radiated from the Atlantic seaports. The economic development of the south and the central west, together with the general prosperity which accompanied the discovery of gold in California, led to the extension of railroad building into the interior. By 1860 American railway mileage exceeded 30,000, and by 1870 a great railway net-work of almost 53,000 miles had been constructed. This achievement was the more noteworthy because

it was accomplished in spite of the depressing influence upon railway construction exercised by the panic of 1857 and by the Civil War. The new lines were situated mainly in the middle northwest, east of the Mississippi and north of the Ohio, though there was some railway building in the south, and considerable additional mileage was constructed in the eastern states. The fifties saw the beginnings of through routes and of the consolidation of connecting lines. The foundations of the present New York Central and Pennsylvania railroad systems were laid in this period. By 1853 an all-rail line from the Atlantic seaboard to Chicago had been established. The Civil War stimulated the development of transcontinental routes, and by 1869 the first transcontinental line had been completed.

During this period the railroads were almost entirely free from governmental interference. Indeed, the community manifested so marked an eagerness to secure railroad transportation that the state's attitude toward the carriers was one of liberality and encouragement. The fundamental character of the new industry, and the intimate public concern in its swift growth throughout the country, served as a basis for generous aid rather than as a reason for restrictive legislation. From the early thirties till the early seventies railroad construction received extensive public assistance. This aid was granted by the state and local governments (often, also, by private individuals), as well as by the Federal Government. The desire to secure access to new markets, and thereby to develop the commercial and industrial importance of particular cities and sections of the country, provided the primary stimulus for state and local aid. The states often granted such subsidies as part of the policy of government aid to works of internal improvement. National aid in railroad construction was designed to promote the settlement of the country and to provide better facilities for the handling of the mails and the movement of troops. State and local aid took many forms. Railroad stocks and bonds were frequently purchased with public funds; but the

hope or expectation that the investments would prove profitable was seldom realized. In some instances interest and dividends on railroad bonds and stocks were publicly guaranteed. There were also direct grants of public funds, either in cash or in state securities. While these grants were generally intended as mere loans, the advances often turned out to be naked gifts. The states also donated to the railroads large tracts of public lands which they had received from the national government. Railroad enterprise was promoted by the Federal Government itself through grants of public lands and loans of public funds. The indirect land grants, through the states, were first made as early as 1850. The first direct federal land grant was made in 1862, to assist in the construction of a line connecting the Missouri River and the Pacific. In the following decade, Congress enacted numerous statutes parceling out large portions of the public domain for railway purposes. Of these federal land grants, as well as of the loans of funds in the form of United States bonds, the transcontinental roads were the chief beneficiaries. It is practically impossible to state with exactness the extent of public aid to railroad construction in the United States, but the most careful and reliable estimates indicate that the subventions of this period reached an unsuspected magnitude. The direct land grants of the Federal Government alone, between 1862 and 1871, reached a total of about 26,000,000 acres, or some 40,000 square miles. The aggregate amount of all the land grants, between 1850 and 1871, has been estimated at 155,000,000 acres, or some 242,000 square miles.[8] In addition, the total of loans and gifts of public funds

[8] "It thus appears that a gift of territory greater by about one-fifth than the entire area either of the German Empire or France, almost equal in size to the state of Texas or four times the New England states, has, at one time or another, been made in aid of railroad construction. The Federal grants equal about two-thirds of the area of the New England states, or, in other words, are about five times the size of the state of Massachusetts. A large proportion of the area of the new commonwealths was offered as a bonus to railroads. Seven western states—including, for example, Minnesota, Iowa, and Wisconsin—gave away from a fifth to a quarter of their birthrights. Nebraska donated one-seventh, and California one-eighth. The Lone Star state

made by the federal, state, and local governments has been estimated at approximately $700,000,000.

This public aid, while too lavish in some instances, was doubtless necessary to stimulate the bold initiative of the early railroad builders and to make available the great advantages of rapid construction and "the wide permeation of the land with railway facilities." But it helped, also, to accentuate the speculative character of American railroad development. In four decades a railway net of some 53,000 miles was constructed. Moreover, through the land grants and loans of this period, foundations were laid for much of the subsequent railroad construction. Transportation systems were thus created far in advance of the needs of the country. Railroad-building preceded, rather than followed, the movement of population and the growth of traffic. As a result, not only did destructive rate wars naturally ensue, but an equally harmful speculative temper was developed in the construction and financing of railway undertakings. Promoters of railroad enterprises frequently sought public aid because it could serve as a basis of profitable speculation. The provision of transportation service was regarded as an incidental. Financial adventurers were attracted to railroad building, railroad capital (generally raised through the sale of bonds and not through stock subscriptions) was extravagantly and often fraudulently spent, and a spirit of irresponsibility in the use of both public and private funds was encouraged.

But public aid was only a contributory or accentuating cause of the speculative abuses of the period. The complete absence of government regulation, in an industry essentially public in character, allowed the prosecution of private self-interest to run wild. The frequent utilization of the "construction company device," whereby unscrupulous insiders derived large per-

discovered in 1882 that in her youthful ardor she had given away some 8,000,000 acres more than she possessed. Shall it ever be said, in the face of such evidence, that these common carriers are private concerns, to be administered solely in the interest of holders of their securities?" W. Z. Ripley, *Railroads: Rates and Regulation*, pp. 36-37.

sonal gains at the expense of the railroad corporations on whose behalf they were presumably acting in a fiduciary capacity, was a practice essentially independent of the policy of government aid. In like manner, the financial manipulations subsequent to the construction period (involving, in some instances, actual fraud and corruption), of which the spectacular operations of Daniel Drew, Jim Fiske, and Jay Gould in the early vicissitudes of the Erie Railroad are classic examples, were symptomatic of a more deep-rooted malady. The individualistic temper of the times, the looseness of business standards, the ease with which railroad charters were secured and the willingness with which public privileges were distributed, the lack of publicity, the relative immaturity of the industry, and the mistaken policy of reliance upon railroad competition for the safeguarding of public interests, all helped to prepare "the harvest . . . for the daring and able operator."

§3. *The Beginnings of Public Control*

In the second period, between 1870 and 1887, the physical growth of the railway net proceeded at a more rapid rate than in the early decades. Between 1870 and 1880 more than 40,000 miles of line were added. Much of this new mileage was constructed in anticipation of future needs, and the speculative practices of the earlier years were further developed. The increase was about two and a half times as great as the growth of population. The intense activity in railroad building of the late sixties continued till 1873, and contributed directly to the severe financial panic of that year. In the year 1872, immediately preceding the depression, almost 7,400 miles of line were constructed. Then followed a lull in railroad construction which lasted till the return of more prosperous conditions in 1878. The resumption of activity in that year was the beginning of an unprecedented period of railroad building. Between 1880 and 1890 more than 70,000 miles of line were built—an unparalleled achievement in this country or else-

where. As compared with an average annual construction of something over two thousand miles prior to 1880, the new mileage exceeded 6,700 miles in 1881, 9,800 miles in 1882, 11,500 miles in 1883, and reached the extraordinary figure of almost 13,000 miles in 1887. During the seventies the new mileage was constructed largely in the states of the upper Mississippi valley; during the succeeding years it contributed in large measure to the development of the southwest and the far western states. Besides the extension of plant, this period was marked by a rapid growth of the export trade, a decided decline in transportation charges which made this growth possible, an outbreak of railroad rate wars which led to these reductions in rates, a general prevalence of discriminatory practices, a wide-spread resort to pooling arrangements as a means of checking the evils of fierce unregulated competition, and an intense speculative activity in competitive railroad building "under the guise of affording satisfaction to the popular outcry for competition as a means of reducing rates."

But from the standpoint of our present purpose, the distinctive characteristics of this period are found primarily in the beginnings of railroad regulation. The policy of public aid was largely relinquished, and a vigorous antagonism against the railroads was swiftly developed. The public mind came to realize that the presence of extensive railroad systems does not necessarily constitute an unalloyed blessing. It was recognized that extraordinary powers were vested in those in control of railroad transportation, and that these powers could be exercised, as in many cases they were exercised, as mere sources of private gain, and in distinct contravention of the public good. This public hostility was nourished by industrial fluctuation resulting from destructive rate wars, by the unjust distribution of preferential railroad advantages, in rates and service, to favored shippers and strategic localities, by scandalous financial manipulation in the construction and management of many of the railroad properties. Numerous attacks were launched against the roads because of excessive railway charges,

and unmeasured fulminations, though essentially just, were directed against private monopoly control in an industry as fundamental as railroad transportation. The railroad owners, largely eastern and European capitalists, ceased to be regarded as public benefactors, and became the targets of violent denunciation. The public approval of liberal aid which had marked the earlier period was transformed into an insistent demand for public regulation.

The impulse toward railroad control came from the middle west. The railway abuses of the late sixties and the early seventies were felt most keenly in that section of the country, and the agitation for public regulation was largely supported by concerted efforts in the states of Illinois, Wisconsin, Minnesota, Iowa, and Missouri. The farmers in these states regarded the prevailing high tariffs at non-competitive points as unduly oppressive, the burden being the heavier because of the decline in prices of agricultural commodities; and they demanded the establishment of lower rates for the transportation of their products to the seaboard. The comparative sparsity of the population, the relatively great length of the hauls, and the intense rivalry for traffic which resulted from the over-supply of railroad facilities, had led the carriers to an untrammeled reliance upon the principle of charging what the traffic would bear; and the practice of local discrimination, and the general disregard of the element of distance in rate adjustments, were the natural outcome. The agitation for relief was espoused by the farmers' granges of these midwestern states, as a result of which the demand for railroad regulation came to be known as the Granger Movement, and the statutory enactments to which it gave rise, between 1871 and 1875, as the Granger Legislation. This legislation dealt almost exclusively with the problem of rates. Unreasonable rates and unjust discriminatory practices were prohibited by statute; schedules of maximum rates to be observed by the railroads were prescribed by legislative enactment; and state commissions were organized for the enforcement of the statutory provisions. These com-

missions, being clothed with powers of rate control, exercised authority much broader in scope than that possessed by the commissions that had been established in a number of the eastern states for some decades. The powers of the earlier commissions had been generally limited to inspection of physical plant, collection of railway statistics, and investigation of alleged violations of charter authority or legislative provisions. While the Granger Legislation differed in detail in the various states, and while much reliance was placed upon direct statutory prescription, so that the jurisdiction and powers of these older commissions were not nearly as extensive as those of the modern railroad commissions of the mandatory type, the general tendency was to center authority in the newly created administrative agencies.

The complete reversal of governmental policy which was ushered in by the substitution of government control of railway enterprise for public assistance in railway development, was attacked by the railroads on many grounds. By an appeal to constitutional limitations, the legal right of the state to regulate railroad rates was denied; violations of contractual provisions of the corporate charters, through such attempted regulation, was charged; the statutory enactments and administrative orders as to rates were declared to be subject to judicial review because of their confiscatory character. But in a notable series of decisions, now known as the granger cases, the Supreme Court of the United States upheld the legal validity of the new legislation at every point. The right of the state to regulate railway rates was declared to be based upon the public character of the railway business—railroad enterprise constituting an undertaking "affected with a public interest"; the violation of charter authority was denied on the ground that grants of immunity cannot be claimed unless definitely and specifically conferred, and that the power to fix rates and charges vested in the railroads did not necessarily involve a renunciation by the state of its superior right of regulation; the right of judicial review (though later recognized) was likewise categorically denied, on

the ground that the determination of the reasonableness of rates, once the right to regulate exists, is a legislative and not a judicial function.[4]

These beginnings in railroad regulation, in spite of the relaxation which accompanied the period of depression between 1873 and 1878 in some of the states, were the foundation of the extensive system of public control which subsequently became nation-wide and enlisted the authority of the federal government as well as that of practically all the states. In 1879 the Hepburn Committee of the New York legislature published the report of its investigation of railroad conditions, and its findings served as a basis for increased activity among the eastern states. The report of the Windom Committee of the United States Senate, submitted in 1874, was the first important step looking to the establishment of federal regulation. While this federal investigation was stimulated primarily by the outcry against excessive railway rates which had been largely instrumental in arousing the granger agitation, and while the conclusions of the Windom Committee assumed that the permanent elimination of railway abuses necessitated the encouragement of competition, through the development of waterways and the construction of parallel lines between the middle west and the eastern seaboard—assumptions and recommendations later recognized as out of harmony with the economic character of the railroad industry—this preliminary inquiry proved both useful and necessary for the initiation of federal regulation. The investigation and report of the Cullom Committee followed, in 1886, resulting in the passage of the Act to Regulate Commerce and the establishment of the Interstate Commerce Commission.

[4] Munn v. Illinois, 94 U. S. 113; Peik v. C. & N. W. Ry. Co., 94 U. S. 164; Ruggles v. Illinois, 108 U. S. 526.

§4. *The Emergence of Federal Regulation*

The importance of the remaining two periods, from 1887 to 1906 and from 1906 to 1914, is to be found chiefly in the development of the principles and machinery of federal regulation which constituted the background of the railroad problem at the outbreak of the Great War. The facts as to material development may be stated briefly. The physical plant continued to grow, but at a much slower rate than in the preceding decades. During the nineties somewhat less than 40,000 miles were added to the railway net. In the years of depression following the panic of 1893 the average annual amount of new construction was less than 2,000 miles as compared with about 5,000 miles at the beginning of the decade. With the resumption of prosperity, the new mileage averaged between 4,000 and 5,000 miles annually from 1900 to 1914. This increase in mileage, as we have noted in the preceding chapter, fell far short of the growth in traffic. Between 1895 and 1905, for example, ton mileage increased 118 per cent. and passenger mileage increased 95 per cent.; during the same period, however, the increase in railway mileage was only 21 per cent. Between 1906 and 1916 the increase was 60 per cent. in ton mileage and 35 per cent. in passenger mileage, but the addition to the number of miles of line was only 16 per cent. In part, this retardation in physical growth of railway plant was due to impaired railroad credit and to the increase of profitable opportunities for industrial investment; in some measure, however, it may be accounted for by the relative adequacy of the main transportation lines. The paramount need during more recent years has been for intensive development of the railway service. And this development has in fact proceeded at a more rapid rate than the growth of railway mileage. From 1890 to 1907, for example, while single track railway mileage increased but 40 per cent., the increase was 130 per cent. in second track, 157 per cent. in third track, 147 per cent. in fourth track, and 130 per cent. in the mileage of yard tracks

and sidings. Growth of trackage constitutes but one element in the intensive development of the service, but it is a very important one.

From the standpoint of regulation, the years between 1887 and 1906, the third period in American railway development, marked the first efforts of the Federal Government to mold the activities of the carriers in the direction of public interest. Sole reliance upon state regulation was recognized as inadequate. The rapid extension of transportation facilities throughout the country and the swift increase of interstate traffic disclosed the necessity of centralized railroad control on a national basis. The old charges of extortion, because of high freight rates, had largely disappeared by the late eighties; but railroad discrimination had become an evil of menacing proportions. The widely prevalent resort to personal discrimination, as revealed especially in the spectacular practices of which the Standard Oil Company was the chief beneficiary, focused public attention upon the abuses of unregulated railroad operation with dramatic effect. The Cullom Committee of the United States Senate, in its report of 1886, declared that "the paramount evil chargeable against the operation of the transportation systems of the United States, as now conducted, is unjust discrimination between persons, places, commodities, or particular descriptions of traffic." [5] And the growing conviction that the states were incapable of meeting the situation was accentuated by the decision of the Supreme Court in the Wabash Case,[6] which enunciated the principle, for which binding precedent was cited, that state regulation of railroads must be confined to intrastate traffic, and that even in the absence of federal action, no authority was vested in the states to regulate such portions of interstate hauls as might lie within their borders. The major portion of railway traffic was thus free from control, and the necessity of national legislation became urgent. As a result of all these influences, the inter-

[5] 49th Congress, 1st Session, Senate Report 46.
[6] W. St. L. & P. Ry. Co. v. Illinois, 118 U. S. 557.

state commerce act, which has remained the basis and principal framework of our system of federal railroad regulation, was placed upon the statute books.

The legislation of 1887 created the Interstate Commerce Commission and ostensibly clothed the commission with power to establish reasonable rates and to prevent discriminatory practices. The primary purpose of the act, and of the extensive machinery set up for its enforcement, was to curb rate discrimination and to check high tariffs. The numerous other provisions incorporated in the enactment were subsidiary to the achievement of this main end. Thus, the anti-pooling section of the law was doubtless made part of the legislation in order to prevent the more effectively, by this indirect means, the levy of excessive charges. In like manner, the provisions enjoining upon the carriers full and uniform publicity in the establishment and change of rates, and vesting in the commission large powers of investigation with reference to the operation and management of the railroads, were calculated to strengthen the authority of the Government in its efforts to remove discrimination and extortion. The regulation of accounting practices was likewise intended to facilitate the discovery and elimination of excessive returns and preferential adjustments, by providing for the commission the necessary information for effective enforcement of the public policy incorporated in the Act to Regulate Commerce

While much was accomplished, between 1887 and 1906, through the instrumentality of this legislation, the Interstate Commerce Commission encountered many difficulties. Some of them, of a relatively minor character, were met by speedy amendment or supplementary legislation. Thus, by an amendment passed in 1889, three days' notice was required for reductions in rates, in order to render more difficult the promulgation of so-called "midnight tariffs," used by the railroads as a means of granting special advantages to favored shippers, in addition to the ten days' public notice of advances stipulated in the original act. The inability of the commission to secure

essential testimony in important investigations led to the enactment of the Compulsory Testimony Act in 1893. The highly burdensome delays which, from the beginning, accompanied the enforcement of the commission's orders in the courts led to the adoption of the Expediting Act in 1903. The Elkins Act of 1903, which was largely urged as an anti-trust measure, in order to remove the artificial stimulus to industrial monopoly provided by preferential advantages in railroad rates and service, and which received the approbation and support of the carriers as a means of bolstering up their decreasing revenues, substantially strengthened the law against discrimination and thereby increased the effectiveness of the commission. As a result of the Elkins amendments the railroad corporations as well as their officers and agents were made liable for the granting of discriminatory privileges; the shippers as well as the carriers were made subject to the penalties provided for the violation of the provisions against discrimination; the published tariffs were declared to be the sole standard of lawful rates, and every departure from them was to be regarded as conclusive proof of discrimination.

But during the same period the Interstate Commerce Commission, through adverse judicial interpretation of the statute, was shorn of its most essential powers for effective administrative regulation of railway rates. For a period of ten years the commission had prescribed maximum reasonable rates in lieu of those which, upon investigation, had been found to be unjust or unlawful. The commission had assumed this authority on the basis of the statutory declaration that all rates must be just and reasonable, coupled with the power vested in it to execute and enforce the provisions of the statute. In the Maximum Freight Rate Decision, however, rendered in 1897, the Supreme Court of the United States decided "that the power to prescribe rates or fix any tariff for the future is not among the powers granted to the commission."[1] The rate-making power of the commission was thus effectively de-

[1] I. C. C. v. C., N. O. & T. P. Ry. Co., 167 U. S. 479.

stroyed. The very foundation of the system of administrative railroad control sought to be established through the creation of the Interstate Commerce Commission was thereby uprooted; for in the absence of governmental authority to prescribe reasonable rates for the future, the shipper is without effective remedy against excessive charges and the public is without adequate protection against the abuse of monopoly power. The object of sound rate regulation is to establish a proper adjustment, as to compensation for service, between the carriers and the public, and not merely to rely upon private redress for each specific injury suffered by the individual shipper; this end was rendered impossible of attainment under the court's interpretation of the commission's rate-making authority.

But the power of the commission was still further nullified by judicial interpretation. The long-and-short-haul clause of the act of 1887 was directed against a special form of local discrimination. It aimed to prevent higher charges in the transportation of passengers or goods "under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance." The commission's interpretation of this provision had justified a departure from the long-and-short-haul principle only when water competition, or railroad competition not subject to the jurisdiction of the Act to Regulate Commerce, was present at the more distant point. Until 1897, this construction rendered the efforts of the commission to reduce the numerous maladjustments of this character that had grown up in the rate structure reasonably effective; in that year, however, the Supreme Court, by holding, in the Alabama Midland Case, that the mere existence of railroad competition at the more distant point constituted such a dissimilarity of circumstances and conditions as to justify a departure from the long-and-short-haul principle, virtually destroyed the power of the Interstate Commerce Commission to keep within due restraint this objectionable form of local discrimination. Thereafter the carriers

were free, without the consent of the commission and without regard to the demands of public welfare, to impose such discriminatory charges wherever their own financial interests would be furthered by such action. The combined effect of the denial by the courts of the commission's rate-making power and their nullification of the long-and-short-haul clause was to cripple the commission very seriously in its efforts to enforce, by specific order, the public policy incorporated in the Act to Regulate Commerce. In the words of the dissenting opinion of Justice Harlan in the Alabama Midland Case:

"Taken in connection with other decisions defining the powers of the Interstate Commerce Commission, the present decision, it seems to me, goes far to make that commission a useless body for all practical purposes, and to defeat many of the important objects designed to be accomplished by the various enactments of Congress relating to interstate commerce. The commission was established to protect the public against the improper practices of transportation companies engaged in commerce among the several states. It has been left, it is true, with power to make reports and to issue protests. But it has been shorn, by judicial interpretation, of authority to do anything of an effective character." [8]

§5. *The Dominance of the Interstate Commerce Commission*

The year 1906 is taken as the beginning of the concluding period in American railway development prior to the war, because through the Hepburn amendments of that year, and through the Mann-Elkins Act of 1910, the authority of the Interstate Commerce Commission was so rehabilitated and extended as to render the commission for the first time, in spite of a number of important deficiencies which we shall note later, an administrative agency reasonably capable of regulating the activities of the carriers for the protection of the public welfare.

The most significant feature of the Hepburn Act was the restoration of the rate-making powers of the commission. Au-

[8] I. C. C. v. A. M. Ry. Co. et al., 168 U. S. 144.

thority to prescribe maximum rates for the future, in lieu of those found to be unjust or unreasonable, was expressly delegated to the commission, so that its control over railway charges was no longer purely nominal, or limited to the right of declaring past rates excessive or discriminatory. This rate-making power was further augmented by the Mann-Elkins Act. The commission was authorized to suspend rate advances pending their investigation as to reasonableness. The 1910 legislation also restored the effectiveness of the long-and-short-haul clause. Through the elimination of the phrase "under substantially similar circumstances and conditions," the long-and-short-haul principle became absolutely binding upon the carriers, unless a departure from it was expressly authorized by the commission. Furthermore, through the extension of the commission's jurisdiction, in the 1906 legislation, the ability of the Government to reach other forms of discrimination was greatly strengthened. The Act to Regulate Commerce was made applicable to express companies, sleeping-car companies, and pipe-lines; the railroads subject to the act were declared to include switches, spurs, tracks, terminal facilities, freight depots, yards, and grounds; the transportation service to be regulated was so defined as to embrace all instrumentalities or facilities of shipment or carriage irrespective of ownership or contract. By these means the commission was the better able to curb the monopoly powers of the Standard Oil Company that were so largely dependent upon its utilization of pipe-lines; the private-car lines, which had been frequently used for the purpose of effectuating rebates to favored shippers, came under the direct control of the commission; the so-called "industrial railroads," or tap lines, which have served in recent years as agencies of preferential treatment, were brought under the jurisdiction of the commission's authority. The "commodities clause" of the Hepburn Act, by the terms of which it was made unlawful for a railroad company to transport in interstate commerce any commodity (other than timber or the manufactured products thereof) of which it is the pro-

ducer or owner, or in which it has any direct or indirect interest (unless such commodity is both necessary and intended for its own use as a common carrier), was likewise directed toward the elimination of objectionable discriminatory practices. And as a means of assisting the commission in the enforcement of all these provisions concerning rates and discrimination, the 1906 legislation conferred upon the commission authority to exercise strict supervision of accounting practices. The general power of the commission to prescribe a uniform system of railway accounts was supplemented by authority to prescribe the forms of all accounts, records, and memoranda; it was made unlawful for the carriers to keep any other accounts or records than those prescribed or approved by the commission; and the commission was given the right of access at all times to the accounts and records of the carriers, and to employ special examiners for their inspection.

Finally, important changes with regard to procedure and enforcement were introduced, through judicial and legislative action, which served to modify the position of the Interstate Commerce Commission. It will be recalled that in the granger cases of the seventies the Supreme Court had denied the existence of the right of judicial review; it had declared legislative enactments and administrative orders with regard to railroad rates and charges, once the right to regulate was recognized, to be final and conclusive. In subsequent cases, however, the doctrine of judicial review began to emerge, and by the end of the eighties it had become definitely established. "The question of the reasonableness of a rate of charge for transportation by a railroad company," said the Supreme Court in 1889, "involving, as it does, the element of reasonableness, both as regards the company and as regards the public, is eminently a question for judicial investigation, requiring due process of law for its determination. If the company is deprived of the power of charging reasonable rates for the use of its property, and such deprivation takes place in the absence of an investigation by judicial machinery, it is deprived of the lawful use of

its property, and thus, in substance and effect, of the property itself, without due process of law, and in violation of the Constitution of the United States; and in so far as it is thus deprived, while other persons are permitted to receive reasonable profits upon their invested capital, the company is deprived of the equal protection of the laws." [9] This right of the courts under the fourteenth amendment to review railroad rates established by legislatures or commissions led to the development of judicial standards of rate reasonableness. The "fair value" and "fair return" of the famous case of Smyth v. Ames,[10] decided in 1898, were but the starting-point in the formulation of principles and technique of railroad valuation. There are radical differences of opinion among students of the railroad problem, and wide divergencies in both theory and practice between courts and commissions, with regard to what constitute proper standards for determining the fair value of railroad property by which the reasonableness of railroad rates is to be tested. Market value, actual cost, reproduction cost, reproduction-cost-new-less-depreciation, cost of replacement, and many modifications and combinations of these standards, have their warm adherents among economists, railroad and public service commissions, and in the courts. The tendencies are even more strikingly divergent in the application of these general standards to particular elements in the valuation process. When the results of the federal valuation of railroad properties, undertaken by the Interstate Commerce Commission in 1913 and still unfinished, are made available, they may serve as a basis for formulating legislative and administrative standards of rate regulation; for the present the dominant authority in matters of valuation, and hence in the ultimate basis of financial regulation, is vested in the courts. Neither the Hepburn amendments of 1906, nor the Mann-Elkins Act of 1910, improved the status of the commission in this regard.

But other maladjustments in the relationship between the

[9] C. M. & St. P. Ry. Co. v. Minn., 134 U. S. 418.
[10] 166 U. S. 466.

Interstate Commerce Commission and the courts had arisen between 1887 and 1906. Intolerable delays accompanied the settlement of railroad rate disputes. The carriers were free, under the original act, to disregard the orders of the commission until such orders were sustained by judicial decision; the burden was upon the commission to take the necessary steps for the enforcement of its decrees; controversies were not terminated until finally adjudicated by the Supreme Court of the United States. Moreover, there was a marked disposition on the part of the federal courts to accord independent consideration to the facts upon which the commission's orders were based, and frequently to admit new evidence that had been deliberately withheld by the railroads at the original hearings before the commission. This attitude of the courts, coupled with a decided tendency on their part to substitute judicial discretion for administrative judgment in large matters of economic policy, served to discredit the Interstate Commerce Commission—diminishing its authority and weakening its influence. The position of the commission was thereby distinctly subordinated to that of the courts; the investigations and hearings of the commission assumed the rôle of preliminary proceedings, merely preparatory to the real adjudication of railroad disputes by the courts.

Many of these difficulties were met by provisions of the Hepburn Act modifying the situation with regard to procedure and enforcement. The orders of the commission became binding immediately upon their promulgation, the burden being thrown upon the carriers to seek relief in a court of competent jurisdiction, or to suffer the accumulation of penalties provided for violation. Provision was made for rehearings before the commission, such rehearings not necessarily operating to suspend the enforcement of the original orders. It was provided that no injunction might be issued restraining the enforcement of the commission's orders without a hearing, after five days' notice to the commission. It was made the duty of the circuit court, upon application for a decree to

enforce an order of the commission, to issue such an injunction if the order of the commission appeared to have been "regularly made and duly served." While there was no concrete enunciation of what constitutes a "regularly made" order, and hence there was still opportunity for the exercise by the courts of a broad judicial review, subsequent litigation, especially since 1910, has disclosed a marked tendency on the part of the courts, through their own interpretation of these provisions, to recognize the Interstate Commerce Commission as the dominant governmental agency for the regulation of the railroads. There has been an unmistakable approach to the ideal relationship between the commission and the courts, in a system of railroad regulation designed to be essentially administrative in character, whereby the function of the courts is limited to determining the constitutionality of the enactments under which the commission operates and restraining the commission within the scope of the powers expressly or incidentally conferred upon it.

§6. *The Railroad Status in 1914*

What, then, was the status of American railroads in 1914? The constructive results may be summarized very briefly. From the standpoint of size of physical plant and magnitude of business operations, a vast enterprise had been developed in the comparatively short history of the industry. There were more than 250,000 miles of line (single track) in the United States, constituting more than one-third of the world's railway mileage. This American mileage, in the striking characterization of Professor Ripley, was "equal to a ten-track railroad completely encircling the globe." The amount of trackage, including multiple tracks and yard tracks and sidings, approached 400,000 miles. The equipment of the railroads comprised some 65,000 locomotives and more than 2,500,000 cars of all kinds. The total amount of capital securities, at par, of railroads having annual operating revenues above $100,000,

exceeded $20,000,000,000; of this amount of railroad stocks and bonds, almost $16,000,000,000 were outstanding in the hands of the public. While this capitalization, whether gross or net, did not necessarily represent an accurate reflection of actual railroad investment, the capitalization of the net income for the year 1914 at 5 per cent. would amount to almost $18,000,000,000, and many reliable students of railroad conditions place the value of the railroad properties at that time in excess of this figure. Such a capital investment would about equal the total amount invested in manufactures in 1914 and would be second only to the amount invested in agriculture. The number of employees directly engaged in railroad transportation was about 1,700,000, and their aggregate annual compensation exceeded $1,373,000,000. Statistics of traffic and of revenue from operation are equally impressive. The total ton mileage of revenue freight, the number of tons of revenue freight carried one mile, exceeded 288.3 billions. The passenger mileage, the number of passengers carried one mile, exceeded 35.2 billions. The total operating revenues were $3,047,019,908; the total operating expenses were $2,200,313,159; the net operating revenue was $846,706,749. A mere recital of these bare facts affords sufficient evidence of the extensive character of the railroad industry at the outbreak of the war.

From the standpoint of regulation, the significant achievements, described in some detail in the preceding pages, may likewise be stated in few words. The public character of railroad transportation was definitively recognized, and the right of the state to regulate the railroads was clearly established. The inherent evils and inevitable abuses which flow from unrestrained competition or unregulated monopoly in the railroad industry had impressed upon the public mind the urgent need of exercising this governmental authority. Accordingly, a comprehensive system of railroad regulation was developed both by the states and by the federal government. Because American commercial and industrial enterprise is predominantly national in character, the Interstate Commerce Commis-

sion came to hold the chief place in this system of railroad regulation. While a large mass of federal and state legislation aimed to impose direct restraints upon the activities of the carriers, and while the very existence of the Interstate Commerce Commission and of the state railroad commissions, as well as the scope of their jurisdiction and powers, was dependent upon statutory enactment, legislative regulation was subordinated to administrative control. In like manner, while the constitutional validity of the enactments of the legislatures and of the orders of the commissions was dependent upon the decisions of the courts, and while the courts were unquestionably clothed with power to invalidate such of the commissions' orders as fell without the scope of the powers conferred upon them, judicial authority in railroad regulation was likewise subordinated, in most respects, to administrative control. It had come to be recognized that both the punitive methods of judicial regulation and the spasmodic and inflexible methods of legislative regulation were ineffective. Only through the continuous and constructive activities of administrative commissions could such an adjustment of the relationship between the carriers and the people be secured as would afford an adequate protection for private rights and a proper safeguard for public interests. And it had been found necessary to clothe these administrative commissions with plenary powers. Hence the Interstate Commerce Commission and the state railroad commissions were of the mandatory type. They possessed extensive authority to enforce reasonable rates and to prevent discriminatory practices.

But this development had not been accomplished without the persistence of some inconsistencies and many inadequacies in the system of railroad regulation. While regulative effort, in some respects, was proving unduly burdensome and unnecessarily restrictive, certain important public phases of the railroad problem were left altogether unregulated. The results

pointed to a double necessity: to both a loosening and a tightening of the governmental reins. These shortcomings made the more difficult the tasks involved in the war administration of the railroads, and rendered the more urgent the need of readjustment following the war. They will be accorded further consideration in subsequent chapters, when we undertake to formulate the essentials of reconstructive policy; at this point we shall present but a brief survey of the character of the outstanding difficulties.

In the first place, a number of legal obstacles to railroad coöperation had been established that run counter to the natural functioning of the railroad industry. The prohibition of pooling arrangements, as incorporated in the original Act to Regulate Commerce, and the prevention of rate agreements and railroad consolidations, under the judicial interpretation of the Sherman Anti-Trust Act, were the more important of these obstacles. Pooling, whether of traffic or revenue, has been resorted to, for the most part, as a means of eliminating rate wars, of preventing discrimination, and of preserving the stability of railroad income. These are all highly desirable ends, from the standpoint of the public interest as well as for the protection of the carriers. With the prohibition of pooling arrangements in 1887, the railroads reverted to simple rate agreements to achieve these ends. These agreements were designed to maintain a reasonable level of rates and charges, to establish service standards, and to promote coöperation among the carriers. When, in 1897, the Supreme Court of the United States declared such agreements to fall within the prohibitions of the Sherman Anti-Trust Act, the roads were compelled to resort to formal consolidation, either through the instrumentality of holding companies, or by means of long-time leases and intercorporate stock ownership. Through consolidation the independence of the constituent companies is destroyed, in all matters of finance and operation, as well as in the adjustment of rates and service. Coöperation is complete; unity of interest is established. In the years following 1897,

therefore, because of the illegality of informal methods of coöperation, the movement toward railroad consolidation was abnormally stimulated. But this tendency, too, was checked through legal condemnation. The prohibitions of the anti-trust act were not only held to be applicable to the railroads, but were interpreted to include all prohibited restraints, whatever the form or method through which they may be achieved. The dissolution of the Great Northern-Northern Pacific combination in 1904 and of the Union Pacific-Southern Pacific merger in 1912 are outstanding illustrations of this policy. As a result, the only means of coöperation open to the railroads was to rely upon informal committees and traffic associations, whose "suggestions" as to rates and service practices, when financial advantage was not thereby jeopardized, were generally followed. Upon this makeshift for unification, possessing no legal validity, the stability of the rate structure and the coördination of facilities were made to depend. In 1914, therefore, at the threshold of the war emergency, the roads were not in a position to adopt effective coöperative measures. It was illegal to pool freight or revenue, in order to establish direct routing, eliminate unnecessary passenger service, or make the fullest use of available equipment; and it was financially disadvantageous, in view of the large number of competitive railroad systems, to provide a unified transportation service.

The persistence of coöperative efforts of varying degrees of effectiveness throughout the history of American railroads is grounded in the very nature of the railroad industry. Because of fundamental physical and economic characteristics the railroad business is naturally monopolistic. In view of the magnitude of the initial investment and the time-consuming process of railroad construction, competition is slow to arise. When it does arise, its chief influence becomes operative only at junction points. Even at these points, it tends to be only of temporary duration, containing within itself the germs of its own destruction. Railroad operations are subject to increasing returns, and stimulate an abnormal desire for traffic; railroad

services are rendered very largely at joint cost, and obscure the profitable limit of rate reduction; railroad plant is highly specialized, and renders impractical an abandonment of the field. Competition between railroad corporations, therefore, tends to become unduly keen and severe, cut-throat in method and self-destructive in result. Resort to coöperation becomes natural and inevitable. It is but a reflection of the monopolistic character of the railroad industry, and serves to protect the public against the evil effects of rate fluctuations and discriminatory practices. The very fact of railroad regulation constitutes a tacit acceptance of this doctrine. Competition cannot be relied upon to safeguard the public interest; the conscious exercise of public authority must be invoked. Railroad transportation is "affected with a public interest" very largely because of this natural tendency to virtual monopoly; and the multitudinous principles and elaborate machinery of regulation are designed to provide safeguards against the abuse of monopoly power. But by invalidating, through legislative enactment or judicial construction, the various coöperative efforts of the railroads sketched in the preceding paragraph, the law adopted a policy logically inconsistent with its own attitude in exercising public control, and practically subversive of the normal functioning of railroad enterprise. Enforced competition was imposed upon an industry assumed to be naturally monopolistic. Rate wars were discountenanced and discriminatory practices were prohibited, but the conditions fundamentally responsible for these evils—the exigencies of railroad competition—were legally stimulated. The fear of unregulated monopoly might well lead to such a policy. But with extensive powers of control vested in administrative commissions, there was no danger that the legalization of pooling, for example, would lead to excessive rates or public exploitation. The conditions of coöperation might themselves be subjected to the supervision of the same governmental authority that was clothed with rate-making power. The anomalous character of the situation and the need of relief had long been recognized, but at the outbreak

of the European war both the railroads and the public were still laboring under the handicap imposed by these legal obstacles to necessary and beneficial railroad coöperation.

Secondly, the rate-making policy of the Interstate Commerce Commission, because of the absence of definite legislative standards, had failed to safeguard the credit of the carriers and attract into the railroad industry a sufficient flow of capital for the proper maintenance and development of the transportation service. This policy had grown up, in piece-meal fashion, to meet the exigencies of changing conditions and to combat the effects of specific evils. Since the railroads had, from the beginning, manifested able and vigorous antagonism toward regulative effort, the activities of legislatures and commissions were confined very largely to restraining railroad abuses, rather than to formulating a constructive program for the establishment of a just and stable relationship between the public and the carriers. The concepts of "fair value" and "fair return" were being laboriously developed by courts and commissions through private litigation, while the law-making bodies refrained from enunciating the concrete principles and standards which alone could render public policy in rate regulation reasonably definite and effective. The Interstate Commerce Commission was saddled with the responsibility of fashioning these standards as well as of applying them; yet the doctrine of confiscation, necessarily enforced by the courts with a very measurable degree of flexibility, subjected its orders to the uncertainties and vicissitudes of judicial review. The policy of the commission, even when positive in tone and constructive in content, was but a preliminary and "advisory" expression of the principles of fair value and fair return that should govern; the final determinations of the courts (because rate-making, in spite of these difficulties, is admittedly a legislative and not a judicial function), were inevitably negative in character. The situation was chaotic. The limitations upon private profit in railroad enterprise were vague and undefined; the minimum

return of which capital could not be legitimately deprived was concretely ascertainable only after prolonged litigation.

As a result of these circumstances, the rate policy of the Interstate Commerce Commission came to be regarded as unduly restrictive. The railroad executives protested against it as unwise and inequitable; the private investor manifested his reaction by neglecting the railroad field. Whether or not these judgments were just is of no immediate concern. That depends, as we have intimated, upon the principles of fair value and the standards of reasonable return which ought to prevail in the light of the essential purposes of public regulation. But that the prevailing rate policy had a harmful effect upon the railroad industry cannot be questioned. After the Interstate Commerce Commission was clothed with power to suspend rate advances in 1910, the carriers found it increasingly difficult to augment their revenues, in spite of the gradual advance in operating expenses and taxes. In the five-year period between 1910 and 1914, operating expenses mounted from $7,658 to $8,944 per mile of line; taxes increased from $436 to $572 per mile of line; net operating revenue shrank from $3,895 to $3,443 per mile of line. Petitions for rate advances, after prolonged investigation, were either entirely denied or the allowances were reduced to nominal amounts, so that the railroads were neither able to secure new capital readily and advantageously, nor in a position to meet their needs out of earnings. The growth of bonded indebtedness was a concrete manifestation of these financial difficulties. The percentage of bonds to total capitalization increased from 49 per cent. in 1900 to 57 per cent. in 1914. The general result was an increasingly burdensome discrepancy between growth of traffic and expansion of railroad plant and equipment, and a wide-spread recognition that the railroads were proving incapable of rendering adequate transportation service. The essential facts establishing this discrepancy, and reliable judgments as to the extent of the physical and financial needs of the railroads, were presented in some detail in the preceding chap-

ter. At this point it is but necessary to note that the rate policy of the Interstate Commerce Commission was commonly regarded, in 1914, as unduly restrictive, that this estimate did in fact lead to the impairment of railroad credit, and that the American railroad system was failing in constantly increasing measure to meet the growing transportation needs of the country. Under these conditions the extraordinary tasks of the war period were approached.

Finally, among the outstanding positive defects of the principles and machinery of regulation to which the railroads were subject at the outbreak of the European war, was the unconscionable burden imposed upon the transportation system through the exercise of confusing and conflicting authority by the nation and the states. It was an almost impossible task for the railroads to comply with the dictates of forty-nine governmental masters, each dominated by its distinctive conception of the demands of public interest, and at the same time to administer successfully the trust reposed in them by the private owners of the transportation properties. Impairment of the railroad service was the natural outcome, and the public users of that service suffered the unavoidable penalties resulting from the maladjustment. The source of the difficulty is to be found in the dual form of our governmental organization. Aside from the limitation of due process, the nation and the states are each supreme in its acknowledged field of activity. Their respective jurisdiction in railroad regulation, therefore, is but part of the larger question of the constitutional distribution of power between the central and local authorities. Since the power of the federal government is confined to the regulation of interstate commerce, and since the Act to Regulate Commerce specifically excluded intrastate traffic from the jurisdiction of the Interstate Commerce Commission, the state assemblies and railroad commissions formulated a mass of legislative enactments and issued a large body of administrative orders for the regulation of carriers conducting transportation within their territorial limits. The regulations of the various states

were frequently in conflict with each other and with the requirements of the federal government. The variety of stipulations with regard to safety devices, operating practices, and financial supervision resulted in confusion and unnecessary expense. Safety appliances were often duplicated by roads crossing state lines; unusually large crews were frequently carried because of abnormal full crew laws; stringent financial requirements were either evaded through ingenious means or served to dam up the flow of capital into particular localities.

But the most difficult problem resulted from the conflict between state and federal authority in the regulation of rates. The right of the states to prescribe intrastate rates was unquestioned; the power of the Interstate Commerce Commission to fix interstate rates was finally established with equal certainty. It was not feasible, however, for purposes of rate regulation, to accept absolutely the traditional distinctions between intrastate and interstate commerce. Most American railroads carry both intrastate and interstate traffic, and the conditions of transport and the exigencies of market competition are such as to render both ineffective and burdensome any delimitation of jurisdiction along purely territorial lines. The artificial political lines which separate the states of the American union bear no essential relationship to the natural channels of industrial activity and commercial intercourse. Moreover, aside from the inevitable fusion of local and national interests in the development of the railroad rate structure, many of the states utilized their power over intrastate rates as a deliberate means of securing economic advantage for themselves at the expense of contiguous states and competitive producers engaged in interstate commerce. Both directly and indirectly, therefore, the adjustment of intrastate rates exerted a powerful influence upon the reasonableness and adequacy of the interstate rate structure. It became urgently necessary to subordinate territorial to functional considerations in the delimitation of jurisdiction between the nation and the states; and the rate-making function, because of the complexity and specialized character

of our economic organization, came to be recognized as inherently national in scope, to be centralized, as far as dominant control is concerned, in the hands of the Interstate Commerce Commission. Considerable progress in this direction has been achieved in recent years through judicial decision. In the Minnesota Rate Case of 1913,[11] involving, among other important issues, the constitutionality of certain intrastate rate reductions on the ground of their interference with interstate commerce (because of their indirect influence upon the prevailing interstate rates to border cities in the neighboring states of Wisconsin and North Dakota), the Supreme Court of the United States declared that Congress possessed the power to regulate even intrastate rates in so far as they burden interstate commerce. Although the decision, in this particular case, upheld the validity of the state rates, because of the absence of Congressional action with regard to them, the right to centralize dominant rate control in the Federal Government was clearly recognized. And in the Shreveport Case[12] of the following year, involving an actual conflict between the Interstate Commerce Commission and the Texas Railroad Commission with regard to certain rates applicable to points entirely within the state of Texas, the Supreme Court upheld the contention of the Interstate Commerce Commission that these rates were discriminatory against competing places in the state of Louisiana, and hence constituted an indirect interference with interstate commerce. But while these decisions were gradually establishing the dominance of Federal Control in rate regulation, the process was slow and laborious, and numerous critical conflicts continued to burden the normal development of the railroad tariffs. The total result of this diffusion of responsibility in railroad regulation was to increase the difficulty and expense of operation, accentuate the maladjustments in the rate structure, weaken the power and influence of the Interstate Commerce Commission, and, through its effect upon earnings,

[11] 230 U. S. 352.
[12] 234 U. S. 342.

to intensify the impairment of railroad credit and the inadequacy of the transportation service.

These positive shortcomings were fundamental and far-reaching; they increased the difficulties of the impending task of the war administration of the railroads, and called for the speedy adoption of remedial measures. But there were also a number of important negative defects, the elimination of which necessitated the enactment of constructive legislation. The more important phases of the railroad problem that had been left entirely unregulated, or in the regulation of which the merest beginnings had been made, especially by the Federal Government, were capitalization, service, and labor.

The Interstate Commerce Commission, although it had frequently asked for authority over railroad capitalization, possessed no power to regulate security issues. This lack of authority rendered more difficult the exercise of its rate-making powers, and tended to obscure the relationship between railroad investment and transportation earnings. Moreover, it made possible the "horrible examples" of financial manipulation in the railway field which have become classic, and helped to lend color to the wide-spread opinion that the railroads were very generally overcapitalized. These circumstances, as well as the prevailing belief that the rate policy of the Interstate Commerce Commission was unduly restrictive, served to undermine the financial position of the railroads and impair their credit. The regulation of security issues by the states did not provide an adequate measure of protection either to the railroads as a whole or to the general public. Only for little more than a decade have such financial powers been vested in the state railroad or public utility commissions; and even now only about one-half of the states exercise such authority. In many cases, therefore, it was still possible for the roads to enjoy untrammeled freedom in the issuance of securities—the legal condemnation of actual fraud constituting practically the only limitation upon financial looseness; while in many other cases, as a result of the existence of stringent and sometimes conflict-

ing financial requirements, the carriers were subject to the costly burden imposed by a variety of masters. Because public control over the issue of securities strengthens the regulation of railroad rates and transportation service, and because railroad enterprise is predominantly national in character, the need for centralization of authority in the Interstate Commerce Commission was widely recognized and earnestly advocated.

The regulation of service was likewise neglected in very large measure by the Federal Government. It was limited, for the most part, to safety appliance acts, establishing express standards for safety of operation, and clothing the Interstate Commerce Commission with power to enforce them, and to extend their applicability as changing conditions might warrant. The problem of the adequacy of the transportation service received very little attention. As a result, periodic car shortages had been recurring during the past two decades, and congestion at terminals was a frequent cause of industrial difficulty. Through the pressure of competition, shippers were treated with unreasonable liberality, and wasteful service practices were allowed to crystallize into established routine. Even in time of urgent public need, the utilization of plant and equipment was determined almost exclusively by reference to legal ownership and corporate advantage. It was beyond the authority of the Interstate Commerce Commission to require the pooling of equipment, or the joint use of facilities, in order that the national railway plant might be fully utilized to meet public needs. These conditions were distinctly detrimental to the transportation service. Their effect was realized most strikingly during the war period, when an unprecedented traffic burden was imposed upon the railroads and the necessity of providing adequate service was of paramount national importance.

And the labor interest, in spite of its crucial significance in the proper functioning of the railroad industry, was also largely outside the field of railroad regulation. Railroad wages, although they constitute the largest single item in the

operating expenses of the carriers, were subject to the supervision of neither the Interstate Commerce Commission nor of any other public agency. The dominant purpose of federal regulation was to secure a proper adjustment, both absolutely and relatively, of railroad rates and charges, but the relationship between rates and wages was entirely neglected. Working conditions among railroad workers were left for private settlement between the carriers and their employees, although these conditions exert an important influence upon the safety of railroad operation. Moreover, the absence of public safeguards against the exploitation of railroad employees through inadequate wages, and against their demoralization through the maintenance of unsatisfactory working conditions, increased the tendency to labor disputes and the danger of disruption of the transportation service. Nor was the existing machinery for the settlement of such disputes either adequate or effective. The extraordinary measures resorted to in the fall of 1916 in order to avert the disastrous consequences of a nation-wide railroad strike disclosed unmistakably the need of a constructive policy for the adjustment of the railroad labor problem.

With the transportation system so developed and so regulated, the railroads were called upon to meet the emergency of the Great War. The succeeding three chapters attempt to describe the problems, policies, activities, and results which emerged in the war administration of the railroads.

CHAPTER III

PRIVATE WAR-TIME OPERATION

The United States became a participant in the Great War on April 6, 1917. President Wilson's proclamation taking possession of the railroads was not issued till December 26, 1917, and Federal Control, for all practical purposes, dates from January 1, 1918. Between April 6, 1917, and January 1, 1918, American railroads, in spite of the war emergency, continued to be operated by their private owners. This period constitutes an important chapter in the history of the war administration of the railroads. The experience of these nine months of private operation emphasized the shortcomings of our transportation structure; disclosed the necessity of Federal Control; and foreshadowed the essential policies and activities of the period of government operation. The railroad adjustment following the termination of Federal Control was likewise influenced by the problems and difficulties encountered during these months of private operation. An adequate description, therefore, of the war administration of the railroads, whether it be treated as a mere historical survey of one aspect of the war effort, or as a determining factor in the molding of permanent railroad policy, must necessarily be divided into two distinct periods: the period of private operation, between April 6, 1917, and January 1, 1918; and the period of Federal Control, between January 1, 1918, and March 1, 1920. It is the purpose of the present chapter to describe the war organization of the railroads during the period of private operation, noting the character of the problems to be met, the methods employed, and the success with which the task was accom-

plished. From such a discussion will emerge the circumstances which led to the adoption of Federal Control, and the fundamental causes which made Federal Control inevitable.

§1. *The Period of American Neutrality*

War conditions date from August, 1914. The European conflict very speedily developed into a world war, and its influence came to be felt in every portion of the civilized globe. Neither America's supposed geographic isolation nor her professed policy of absolute neutrality removed the United States from the virile tentacles of the great struggle. The early difficulties, however, were chiefly political in character, resulting from international friction growing out of the unusual scope of the allied blockade and the ruthlessness of German naval warfare. The organization of American economic power in support of allied military effort was slow in developing. Indeed, the sudden outburst of war and the uncertainties of the world situation thrust a sharp restraining influence upon American enterprise. During 1914 and 1915, therefore, industrial activity in the United States slackened rather than intensified, and the traffic demand upon the railroads diminished. Whereas in 1913 there had been an increase of 14 per cent. in ton mileage over the year 1912—the total freight ton miles rising from 264.1 billion to 301.7 billion—there was a decrease of 4 per cent. during 1914, the ton mileage falling to 288.6 billion, and a further decrease of 4 per cent. during 1915, the ton mileage falling to 277.1 billion.

It was not until the year 1916 that the allied belligerents began to draw in large measure upon the economic resources of the United States. Munitions of war and foodstuffs began to flow to Europe in constantly increasing quantities. American exports increased from $2,716,000,000 in 1915 to $4,272,000,000 in 1916; our favorable balance of trade grew from $1,094,000,000 in 1915 to $2,136,000,000 in 1916. These facts, even after due allowance is made for the changing price level, reflect

the intensification of industrial activity in the United States. As a result the railroads were called upon to carry an unprecedented volume of traffic. The 1915 ton mileage of 277.1 billion rose to 366.1 in the calendar year 1916—an increase in this single year of about 89 billion ton miles, or 32 per cent. The burden began to tax railroad plant and equipment. Yards and terminals became congested. The effect of car shortages came to be acutely felt. Throughout the years 1914 and 1915 no net car shortage had appeared. On the contrary the surplus of idle cars had risen as high as 241,802 cars on June 1, 1914, and 327,084 cars on April 1, 1915. The first car shortage of 1916, amounting to 19,537 cars, appeared on March 1, and it rose to 114,908 cars on November 1. These car shortages, and the general inadequacy of plant and equipment for the satisfactory movement of freight, were the result of increased industrial activity arising out of the European war demand, but they were not essentially different from the transportation difficulties that had appeared periodically for more than a decade. In every period of industrial expansion and business prosperity since 1907, especially during the heavy seasonal demand of the fall months, railroad facilities had proved inadequate. As a result of the abnormal prosperity of the year 1907, there were car shortages in eight of the twelve months. While the business depression of 1908 and of the greater part of 1909 resulted in a maximum surplus of 413,338 idle cars on April 29, 1908, small car shortages appeared again in October and November, 1909. In 1910 and 1911 the car supply was more than sufficient for all traffic demands. Throughout the fall months of 1912, however, there were again serious car shortages, reaching a maximum of 51,259 cars on November 7; and there were slight shortages in October and November of 1913.

The railroad situation in 1916, therefore, was not altogether new, in spite of the abnormally heavy traffic. The European war, rather than normal industrial expansion, was the source of the added burden; but since the United States still main-

tained its status of formal neutrality, the organized public interest was not subjected to unusual strain because of the special circumstances of war. While the legal right of American producers to supply the belligerents with food, munitions, and materials, was supported by ample precedent in international law, and the moral duty to do so was vehemently urged by a large and influential portion of our citizenship, the resulting industrial activity and commercial intercourse concerned private individuals, firms, and corporations. The United States Government and the American people as such were not directly involved. The inadequacy of the transportation system did not at that time jeopardize the results of unified national will or of concerted national action that are inevitably at stake in actual international conflict.

It is, of course, true that the provision of safe and adequate railroad facilities, at reasonable rates and charges, under such conditions of adjustment between different classes of traffic, competing producing and distributing centers, and rival shippers as are in harmony with the natural functioning of the productive process, constitutes an imperative public duty. The steam railroads are the public highways of the modern world. They are the arteries of social and commercial life. Whether the state undertakes to provide this indispensable service directly, or delegates its authority to private corporations, the obligation to meet the public need for transportation facilities and to safeguard the public interest in their operation is unquestioned and fundamental. In so far as the American transportation structure falls short of accomplishing these ends, change and modification of existing adjustments must be introduced.

But these obligations were essentially as binding in 1914, and in the years preceding, as they were in 1916. The causes of these shortcomings were permanent, and the maladjustments which they reflected were evolved under normal peace-time conditions. There was no actual war emergency in 1916, and no extraordinary war measures were necessary. Even the threat-

ened disruption of the railroad service through a nation-wide strike in the fall of 1916 was but a reflection of the traditionally unsatisfactory adjustment of labor relationships in the railroad industry. The essentially war character of the railroad problem did not emerge till the year 1917, and the war-time operation of the railroads may be said to date from the beginning of that year. While the United States did not formally enter the war till April, and no definite organization of the railroads for purposes of coöperation came into being until after the declaration of war, we were so obviously drifting into armed conflict during the last three months of "neutrality," that improved satisfaction of allied economic needs came to be regarded as essential to our national self-interest, even before diplomatic relations with Germany were broken off "altogether."

§2. *The War Burden of the Railroads*

War expressed its demand upon the railroads in terms of traffic. The extraordinary traffic increase of 1916—an addition of 32 per cent., or 89 billion ton miles, over the preceding year—was further augmented in 1917. The ton mileage for that year reached the unprecedented total of more than 398 billion. This constituted an increase of about 9 per cent. over the abnormally large 1916 tonnage, and of 32 per cent. over the tonnage of 1913, which had been the high-water mark in railroad traffic up to the war period.[1] The mere growth of traffic, in

[1] Compare the following from C. O. Ruggles, "Railway Service and Regulation," *Quarterly Journal of Economics*, Vol. XXXIII, November, 1918, pp. 129-130: "In the first five months after a state of war was declared between this country and Germany, the railroads handled more freight tonnage than in any whole year previous to 1904. On 51 per cent of the railroad mileage of the United States in the summer of 1917, there was an increase of 16 per cent, or 3,354,000,000 ton miles in one month. This was equivalent to adding 35,000 miles of railroad to that of the United States, with an average density of freight traffic on each mile equal to the average density of all railroads in the United States in 1915. This virtual addition to the fixed plant of American Railroads nearly equaled the total railway mileage of Germany in 1913 and exceeded that of Great Britain in 1914. In



view of the extreme urgency of the war demand, presented an operating problem of the utmost importance. But the character of the demand had also changed. The 1916 increase had been stimulated primarily by the export of food and munitions to Europe while we were still a neutral power. The maintenance of an uninterrupted flow of materials and supplies to the European belligerents became imperative when we associated ourselves with them in active warfare. Vast quantities of goods were constantly being transported to the seaboard for shipment to Europe in support of our allies. Our immense exports of 1916—aggregating $4,272,000,000—reached the staggering total, during 1917, of $6,227,000,000.

But the actual prosecution of war imposed upon the railroads a huge domestic burden, also, both military and industrial. The extent of American participation in the war was dependent upon the effectiveness of our mobilization of manpower and resources. Troop movements alone imposed a heavy traffic demand upon the railroads. The year 1917 saw the beginning of the mobilization and subsequent demobilization of an army of five million men, over two million of whom reached the theater of operations on the battlefields of Europe. These troops had to be transported from points of mobilization to training camps, and from training camps to ports of embarkation. The camps themselves had to be speedily constructed, necessitating the transport of large quantities of materials; and while at the military camps, our embryonic army had to be supplied with food, clothing, and equipment for training purposes. When the men reached France, they were still supplied for the most part from bases in America.

The added industrial burden, in so far as it can be distinguished from the military burden, resulting from the belligerency of the United States, manifested itself not only in the further stimulation of the so-called essential industries for the

the last annual report of the Pennsylvania Railroad Company, it is claimed that the ton mileage of that system for the year 1917 exceeded by over 60 per cent. the combined annual ton mileage before the war of all of the railroads in Great Britain and France."

more effective support of our allies, but in the unparalleled increase of our own governmental expenditures. These expenditures jumped from the billion a year basis of the pre-war period to a war expenditure of about a billion dollars a month. A substantial portion of this increased expenditure served to intensify industrial activity and to increase railroad traffic. In spite of the great restriction of private consumption effected by the organized efforts of many governmental and patriotic agencies, the productive capacity of the country was driven to the utmost. During the year 1917 the national output reached a peak never before attained.[2] Transportation played an essential rôle in this speeding up of the productive process. Our railroad systems were subjected to an enormous strain.

But the extent of the transportation burden is not to be measured merely by the growth of traffic. In the first place, expedition in the handling of freight assumed unusual importance. Not only was it necessary to supply our troops at home and abroad, but no delay in supplying them could be tolerated. A similar urgency dominated the export situation, especially in the provision of foodstuffs for our allies. Moreover, the handling of troops in this country required special facilities, particular care as to safety, some degree of secrecy, and reasonable speed. About two-thirds of the troops moved necessitated the provision of special trains. The service also required much care and detailed adjustment in routing,

[2] According to Professor Wesley C. Mitchell's index number for production during the war period, production increased 16 per cent. in 1917, as compared with 1913. (*History of Prices During the War, Summary*, War Industries Board Price Bulletin No. 1, p. 45.) According to B. M. Anderson's index number, production increased 16.7 per cent. in 1917 over the output of 1913. (*New York Times Annalist*, January 6, 1919.) According to Professor David Friday, "There is evidence that we have increased our output of products from 25 to 30 per cent. over the pre-war period through the complete utilization of our natural resources, our plant and machinery, and our labor." (*Journal of Political Economy*, Vol. XXVII, No. 2, February 1919, p. 117.) According to Professor Walter W. Stewart's index number, production increased 24 per cent. in 1917, 25 per cent. in 1918, and 20 per cent. in 1919, as compared with the average of the years 1911 to 1913. (*The American Economic Review*, Vol. XI, No. 1, March 1921, p. 68.)

scheduling, feeding, and so on, not normally involved in an increase in passenger traffic. Furthermore, the major portion of the increased traffic burden was concentrated in the eastern section of the country. The bulk of the export trade and the flow of supplies in support of our expeditionary forces necessarily passed through the Atlantic seaboard cities. The trend of traffic was so predominantly eastward, that a vast accumulation of loaded cars, and often of entire trains, at eastern terminal and junction points rapidly followed, and western producing centers were deprived of "empties" for the movement of essential freight. These conditions resulted in the greatest congestion of traffic in yards and terminals and the largest car shortages ever experienced in this country. In February, 1917, 145,000 cars had accumulated at eastern terminals. Throughout the year the car shortages were very serious, but they became particularly threatening just prior to our recognition that a state of war existed between the United States and Germany. On March 31, the net car shortage reached the enormous total of 144,797.[3] Finally, the burden of the railroads was intensified by the decreased resort to water transportation. The compelling demands of the ocean carrying trade resulted in a progressive withdrawal of vessels from the Great Lakes and from coast-wise shipping. As the water-borne tonnage, in domestic commerce, gradually diminished, the difficulties of the railroads were intensified; for this important auxiliary transportation instrument became less available as the need for its utilization became more urgent.[4]

[3] This car shortage was exceeded but twice during the year 1917, and only slightly. On May 1, the shortage was 148,627 cars; and on November 1, it was 148,494 cars.

[4] "That less water-borne traffic has been responsible for a part of this marked increase in rail traffic (during 1917) may be seen from the fact that vessels, not only from the Great Lakes but from our intercoastal trade, have turned to the more profitable ocean carrying trade. This shift is reflected in the percentage of our exports and imports which have been carried in American vessels since the war began. In the fiscal year 1914, this percentage was 9.7; in 1917, it was 18.6. In the fiscal year 1915, there was a total of 335 vessels with 1,846,658 tons cargo in the coastwise trade from the Atlantic to the Pacific and *vice versa*. In the first half of the fiscal year 1917, there

The aggregate result of all these factors was an enormous strain upon the railroad structure. The question of ways and means of meeting this extraordinary situation constituted the characteristic war-time railroad problem. The organization, policies, and activities relied upon for its solution constitute the war administration of the railroads.

§3. *Public versus Private War Administration*

In view of the acute character of the railroad situation, as briefly outlined above, and in face of the critical importance of America's participation in the war, the assumption of public control of our transportation systems upon the outbreak of hostilities between the United States and Germany would have constituted the natural initial step in the war administration of the railroads. Concentration of effort and unity of control are indispensable to success in modern military enterprise. They are as necessary for the full utilization of economic resources as they are for complete coördination of military operations. And since war is a national undertaking, this concentrated effort and unified control, in all essential matters, must be vested in the Government. With respect to railroad transportation the wisdom of this policy was recognized immediately by all the leading European belligerents. In England, where as in the United States private ownership and operation of the railroads is normally relied upon, the roads were taken over by the Government as early as August 4, 1914, the very day that war was declared against Germany. In France, too, the Government assumed control of the operation of all the railroads immediately upon the outbreak of war. In Italy public ownership and operation represented the country's permanent policy.

were but 18 vessels with a tonnage of 97,363. From testimony before the Newlands Committee, it appears that prior to the autumn of 1915 there never had been a record of a carload of grain moving from Oregon or Washington over the Union Pacific to the Atlantic Seaboard; that since that time, many thousands of carloads had been sent overland on that and other railways to Atlantic ports." C. O. Ruggles, *op. cit.*, pp. 130-131.

and no radical readjustment was necessary. Germany's government railroads were in large measure constructed and organized, during her forty years of preparation for "the next war," under the dominating influence of military needs. The United States, of all the great powers, failed to resort to government operation upon the outbreak of war. For a period of nine months sole reliance continued to be placed upon our traditional system of private management.

The continuation of this policy represented the free choice of our governmental authorities. The power exercised by the President in issuing his proclamation of December 26, 1917, whereby the railroads were brought under Federal Control, was available on April 6, 1917, when a state of war with Germany was formally recognized. In addition to the constitutional authority vested in the President as commander-in-chief of the military forces of the United States, the power of public railroad operation had been specifically conferred upon him. As early as August 29, 1916, more than seven months before the United States entered the world war, the following provision was enacted as part of the Army Appropriation Act: "The President, in time of war, is empowered, through the Secretary of War, to take possession and assume control of any system or systems of transportation, or any part thereof, and to utilize the same to the exclusion, as far as may be necessary, of all other traffic thereon for the transfer or transportation of troops, war material and equipment, or for such other purposes connected with the emergency as may be needful or desirable." The President specifically relied upon this authorization in his subsequent decision "to take possession and assume control" of the railroads.

American reliance upon private railroad operation during the first nine months of the war may be traced to a number of causes. In the first place there was a general disposition on the part of the Government, apparent in many of its early war activities, to resist an immediate and energetic transition from a peace to a war economy. The critical character of the mili-

tary situation was not clearly recognized in April, 1917. There was a wide-spread feeling that American participation in the war might be restricted to the provision of auxiliary services—money and supplies, for the most part—without the necessity of thorough-going organization on a war basis. The vigorous German offensive of the following spring—launched on March 21, 1918, the very day of the enactment of the Federal Control Act—was not foreseen by the American people as a whole, nor even by the inner group of governmental officials who were presumably in closest touch with the realities of the military situation. Not until after the visit of the French and British commissioners did the stupendous military importance of the rôle to be played by America begin to dawn upon the American mind. The Government's *laissez-faire* attitude toward the railroads during the early months of war was but the reflection in a particular field of its general disposition to "make haste slowly" in mobilizing American man-power and resources for actual participation on European battlefields.

But another and more fundamental cause serves to explain the retardation of federal railroad control. The most effective obstacle to an immediate transition to government operation was the deep-rooted individualistic temper of the American people. The exigencies of war did not lead to the instantaneous transformation of the spirit of individualism. It continued to exert a powerful influence in spite of war, and even in the adjustment of the status of a semi-public industry like railroad transportation. The railroad executives were inclined to resist the adoption of government control, until the pressure of events compelled them to accept it as an emergency measure. In part they were doubtless imbued with the desire to safeguard their opportunity to render responsible patriotic service in a great cause. But the dominating influence unquestionably sprang from their determination to avert, if possible, an experiment in public operation that might result in its establishment as permanent railroad policy. From the beginning, therefore, they naturally set forth, with the emphasis of conviction,

the superiority of experienced and highly organized private initiative over untried and undefined public effort, even in the war emergency. The same frame of mind was manifest when the spokesmen for the carriers subsequently insisted upon the establishment of a fixed or definitely ascertainable time for the termination of Federal Control, so that the war experiment might not be "construed as prejudicing the future policy of the Federal Government concerning the ownership, control, or regulation" of the railroads; and the basis of the most vigorous opposition to the proposal for the extension of Federal Control for a period of five years, made by Directors-General McAdoo and Hines after the armistice, was likewise centered in the combination of deep-seated antipathy to government ownership and operation, and in the wide-spread fear that "an entering-wedge" in this direction might prove dangerous.

The railroads succeeded in establishing their point of view on all these occasions, not alone because their interests were compactly organized and their opinions expertly presented, but because their attitude was representative of the judgment and wishes of the most influential portion of the American people. While, in the course of the war, there was great intensification of governmental activity, and the field of public control over industrial action became very extensive, at its outbreak the traditional American presumption against collective economic enterprise still prevailed. This presumption was potent enough to induce the federal administration, admittedly progressive in its tendencies, and often charged with semi-socialistic leanings, to rely upon private railroad operation during the first nine months of the war. When the roads were finally taken over by the Government, President Wilson declared, in the statement accompanying his proclamation, that it had been "in the spirit of American institutions to attempt to do everything that was possible through private management"; and when, on January 4, 1918, he delivered his address to Congress reporting the initiation of Federal Control, he emphasized once more the basis of his reliance upon private

railroad management during the early months of the war: "It was in the true spirit of America, and it was right, that we should first try to effect the necessary unification under the voluntary action of those who were in charge of the great railway properties; and we did try it."

§4. *The Railroads' War Board*

But while America's declaration of war did not bring immediate federal railroad control, the necessity of such coördination of the various operating agencies as would make a reasonable degree of unification possible, was at once recognized. Such results could be realized, under private management, only through extensive coöperative action. Organization for this purpose was definitely effectuated five days after the declaration of war. On April 11, 1917, the leading railroad executives of the United States met in Washington, and in conformity with the request of the Council of National Defense submitted through Daniel Willard, vested large powers in the Special Committee on National Defense of the American Railway Association, and centered chief authority in its executive committee of five members. This executive committee was subsequently designated by the carriers and their administrative officials as the Railroads' War Board.[5] The basis of this delegation of authority was an agreement by the carriers, amongst themselves, and with the federal and state governments, whereby the railroads pledged themselves, during the continuance of the national emergency, to "coördinate their operations in a continental railway system, merging during such period all their merely individual and competitive activi-

[5] The members of the Railroads' War Board were Fairfax Harrison of the Southern Railway, Chairman; Samuel Rea of the Pennsylvania Railroad; Howard Elliott of the New York, New Haven and Hartford; Julius Kruttschnitt of the Southern Pacific; and Hale Holden of the Chicago, Burlington and Quincy. Daniel Willard of the Baltimore and Ohio, representing the Council of National Defense, and Edgar E. Clark of the Interstate Commerce Commission were members ex officio.

ties in the effort to produce a maximum of national transportation efficiency."

The Railroads' War Board was immediately organized (April 11, 1917), and opened headquarters in Washington. The larger questions of policy were determined by the entire Board. For this purpose, it kept in constant touch with the Council of National Defense, through Daniel Willard, and with the Interstate Commerce Commission, through Edgar E. Clark, who were both ex-officio members of the Board. In addition, it created a number of sub-committees, through which the Board was enabled to keep in close and constant contact with the Government, and to provide the necessary organization for the various military tasks which the railroads were called upon to perform. In view of the fact that traffic congestion and acute car shortage were the outstanding difficulties of the railroad situation upon America's entrance into the war, the most important of the services rendered by these sub-committees was that performed by the Commission on Car Service.

By act of Congress of May 29, 1917, the Interstate Commerce Commission was given express jurisdiction to regulate car service. This legislation vested in the Commission summary power over "the movement, distribution, exchange, interchange, and return of cars used in the transportation of property." The carriers were required to "establish, observe, and enforce just and reasonable rules, regulations and practices with respect to car service," but the Interstate Commerce Commission was authorized to "suspend the operation of any rules, regulations or practices then established with respect to car service for such time as may be determined by the Commission," and it was empowered to issue such orders "as in its opinion will best promote car service in the interest of the public and the commerce of the people." Accordingly, in July, 1917, the Interstate Commerce Commission organized a division of car service, later known as its Bureau of Car Service. But the activities of the carriers' Commission on Car Service made it unnecessary for this Bureau to exercise the

summary powers conferred by the new legislation. It had been the traditional policy of the Interstate Commerce Commission to limit itself to a minimum of participation in actual railroad management, and in accordance with this policy it was contented to coöperate with the carriers' commission and to serve merely in an advisory capacity in this matter. In its annual report for 1917, the Commission declared: "Where occasion requires, orders or directions will issue under the car service act and directly to the carrier or carriers directly concerned. Subject to this fundamental principle, the Commission is availing itself, and will continue to avail itself, of coöperative effort on the part of the carriers' commission on car service." [6] And in its annual report for 1918 the Interstate Commerce Commission testified that "directions to the carriers' commission on car service sufficed to effect compliance with directions of the bureau of car service."

In spite of the coöperative policy of the Interstate Commerce Commission, and in spite of the absence of any other official transportation agency during the months of private operation, the railroads were hampered by divided authority in their efforts to relieve traffic congestion. It was the policy of the carriers to allow priority of transport to all government shipments and to raw materials and supplies for essential industries. But under the powers vested in the President to direct that priority be accorded to the transportation of troops and the carriage of materials of war, the War Department, the Navy Department, and the United States Shipping Board exercised authority over car service by requiring preferential rights in the shipment of extensive tonnage originating under their jurisdiction. The Food Administration and the Fuel Administration likewise exercised authority over the transportation service through regulations governing the purchase and sale of certain foodstuffs and instructions affecting the movement of fuel. Since it was becoming increasingly apparent

[6] Thirty-first Annual Report of the Interstate Commerce Commission, 1917, p. 66.

that the growing traffic burden would inevitably exceed the carrying capacity of the roads, as then organized, the railroads desired and the public welfare demanded that authority for determining priority or preference in the transportation of essential commodities be centralized. Accordingly, a Priorities Statute was passed on August 10, 1917, and control of priority orders was entrusted to Judge Robert S. Lovett of the Union Pacific Railroad as Director of Priority in Transportation. Judge Lovett exercised the powers vested in the President to dictate the order in which transportation needs should be satisfied, by granting preference or priority to such traffic as he deemed most essential to the national defense and the country's welfare. Greater coördination followed, and the efforts of the railroads to meet the exigencies of war through voluntary cooperation were somewhat facilitated, as the inefficiency which naturally accompanied diffusion of control over car service was partially eliminated. Not until the unified practices of Federal Control were established was this hampering influence of divided authority entirely removed.

The Railroads' War Board, acting through the Commission on Car Service and its other agencies, as well as by direct order, began at once an extensive campaign of publicity among shippers for fuller and more efficient utilization of available tonnage. In so far as mere persuasion proved ineffective, rules and regulations were formulated concerning the use of equipment and the movement of freight. Embargoes were placed on congested areas. Every effort was made to increase the average load per car. Carload shipments were everywhere encouraged. Equipment was transferred from the less active localities to sections of the country where the need was most urgent. Passenger train service, in so far as it was deemed "unnecessary," was curtailed. The daily mileage of both freight cars and locomotives was substantially increased. The idle time of equipment of all kinds was greatly decreased. To some extent both traffic and equipment were pooled. The Board authorized pools of coal and iron ore at Lake Erie ports, a pool of coal

at Atlantic ports (the so-called Tidewater Pool), and the pooling of box-car equipment throughout the country with the suspension of restrictive car service rules. On November 24, when the situation became critical and the transition to Federal Control was fast approaching, an order was issued directing "that all available facilities on all railroads east of Chicago be pooled to the extent necessary to furnish maximum freight movement." The railroads regarded this step as a revolutionary measure for the relief of traffic congestion on the eastern lines. In its announcement of this order the Railroads' War Board stated: "The effect will be that to the full extent that conditions render it desirable the railways will be operated as a unit, entirely regardless of their ownership and individual interests. The operating vice-presidents of the eastern lines have been appointed a committee to operate as a unit all the lines involved, and have been given instructions and authority to adopt all measures which, in their judgment, may be necessary to relieve the present situation and assure the maximum amount of transportation. . . . An important part of the plan adopted for the operation of the eastern lines is that of placing at their disposal facilities of railways in other territories to such an extent as may be necessary." [1]

The accomplishments of the Railroads' War Board during the period of private war-time operation were both substantial and important. During the greater part of the period, as a result of willing and active coöperation between the railroads, the shippers, and the public authorities, the increased traffic burden was carried with reasonable success, and the congestion was considerably alleviated. While, as we shall see later, no "continental railway system," in any real sense, resulted from the coöperative activities of the railroads, it is equally true that their "merely individual and competitive activities" were not allowed the free rein of normal operating conditions. The demands of the war emergency were sufficiently control-

[1] Quoted in Thirty-second Annual Report of the Interstate Commerce Commission, 1918, p. 8.

ling to prevent a breakdown of the railway service during the spring and summer months. The mere statement of the methods employed, briefly described in the preceding paragraph, indicates the unusual character of the operating policies adopted by the railroads and the accompanying increase in the efficiency of the transportation service. A quantitative statement of the results is even more impressive. We have already noted the large increase in the traffic burden which the railroads were called upon to handle during the year 1917;[8] some of the detailed achievements through which this task was accomplished provide concrete evidence of the general success of the undertaking for the greater part of the period. The measure of relief from congestion may be gathered from the fact that the new code of car service rules and the pooling of box-cars resulted in a reduction of the accumulation of cars at eastern terminals from 145,000 in February to about 60,000 in July. The car shortages of 144,797 on March 31, and 148,627 on May 1, were reduced to 33,776 on August 1, and 34,605 on September 1. In the course of the year an increased freight tonnage of 9 per cent. (over 1916) was handled without substantial increase of equipment: an increase in average carload of 9.3 per cent., in average trainload of 7.3 per cent., and in locomotive mileage of 1.9 per cent., during the first eight months of the activities of the Railroads' War Board, helped to make this possible. Between May and October, 156,850 empty cars had been requisitioned from carriers whose need for them was not immediate, and transferred to localities in which the need for equipment was urgent. The voluntary reduction in passenger train mileage—accomplished chiefly in order to conserve fuel—was estimated by the War Board to amount to 25,000,000 a year. The coal pools justified themselves by permitting an increase of nearly 21 per cent. in the number of loaded cars of coal moved from the mines, during the five-month period ending September 30, 1917, as compared with the corresponding period of the preceding year. By the first of December 128,350

[8] See §2, pp. 69-73, *supra*.

cars of materials had been promptly delivered to the army cantonments. Details of this character might be multiplied. The sole purpose at this juncture is to indicate that the administration of the railroads during the period of private operation attained a measurable degree of success in meeting the exigencies of the war crisis.

These accomplishments were the more notable in view of the fact that the coöperative efforts of the railroads were entirely voluntary. The Railroads' War Board had no legal status. The carriers were under no legally-binding obligation to comply with its orders. The coöperation of shippers was largely induced by patriotic motives. The War Board was in its very nature, therefore, but an advisory committee; that its recommendations and suggestions received wide and willing acceptance bespeaks the high spirit of the time and the common determination (partly spontaneous and unselfish, partly the result of public pressure) to render public service in a great national emergency. Moreover, there were serious legal obstacles to the operation of the roads as "a continental railway system." The carriers were subject to the prohibitions of the Sherman Anti-Trust Act, as far as agreements as to rates or actual consolidation is concerned; and the right to pool earnings was expressly denied them by the anti-pooling section of the Act to Regulate Commerce. Even in so far as traffic was pooled by the roads, it was done under the extra-legal sanction or toleration of the public authorities. Some of their policies, actual and projected, might have been construed, also, as running counter to the law against discrimination. Furthermore, the maintenance of the identity and independence of the individual roads, in spite of their general agreement to operate their properties in such a way as to merge their merely individual and competitive activities, created conflicts of financial interest inherently inconsistent with thorough-going coördination of operating policy. In the face of all these obstacles, the results may be said to have been decidedly creditable. Voluntary private coöperation was superseded by Federal Control,

as we shall discover in the following pages, not primarily because the Railroads' War Board, considering its limitations of authority and the character of the legal framework to which it was subject, failed in its undertaking, but predominantly because private railroad operation as such was fundamentally incapable of providing that centralized direction of transportation service demanded by the extraordinary war situation. The President, in his address to Congress of January 4, 1918, clearly recognized the nature of the difficulty; the history of the war administration of the railroads under private management fully justifies his interpretation of the transition to Federal Control:

"The directors of the railways responded to the need (of unification) promptly and generously. The group of railway executives who were charged with the task of actual coördination and general direction performed their duties with patriotic zeal and marked ability, as was to have been expected, and did, I believe, everything that it was possible for them to do under the circumstances. If I have taken the task out of their hands, it has not been because of any dereliction or failure on their part, but only because there were some things which the government can do and private management cannot."

§5. *The Transition to Federal Control*

But the achievements of private operation under the guidance of the Railroads' War Board were not sufficient to meet the extraordinary needs of war. The inexorable logic of events made the transition to Federal Control inevitable. In the late fall and early winter the inability of our transportation system to bear the strain of the swiftly growing traffic burden became apparent in all parts of the country. A complete breakdown of the service was seriously threatened. The car shortage, which had reached the low point of 33,776 on August 1, increased to 148,494 cars on November 1. The congestion of freight and rolling-stock in the eastern district virtually paralyzed the railroad service. Loaded cars on the eastern lines numbered 180,000 above normal. Terminal facilities became

so congested that the flow of traffic came almost to a standstill. The obstacles encountered in securing the release of rolling-stock were themselves the result of conditions which they helped to accentuate. The eastern wharves could not be cleared of the freight which had accumulated there in huge quantities, because of the lack of shipping facilities for trans-Atlantic transport; and this lack of ships, ready to sail, was due in large measure to their inability to secure coal because of the railroad congestion. The coal situation was the worst in our history. Ships with vital supplies for Europe waited for weeks to be coaled. Shortage of cars at the mines, the rigors of abnormally severe winter weather, the inadequacies of the prevailing system of coal distribution, the diminution of coastwise coal traffic by ship, all contributed to the extreme gravity of the situation. Both New England and the Northwest were threatened by a serious coal famine. Production was curtailed, the process of mobilization was retarded, much private suffering was endured. The roads lacked equipment to carry the enormous traffic, and in view of the essential lack of authority of their War Board and the illegality of pooling revenues, and of other means of concentrating control, they seemed unable further to increase their capacity by intensive means. Conflicting orders as to freight priorities, despite the formal centralization of authority in the Priorities Director, added to the difficulties. Moreover, the carriers were unable to secure the necessary capital for purchase of equipment and expansion of plant and facilities. Railroad credit had been at a low ebb even before the war; in competition with the enormous government borrowing, the railroads were helpless. And the pressure of foreign demands upon the productive capacity of the equipment companies hampered the roads in their utilization of such new capital as could be made available. Industries capable of manufacturing rolling-stock were engaged at almost full capacity on orders for European railways and for American railways in France.

Under all these circumstances, the heroic efforts of the Rail-

roads' War Board toward the end of the period of private operation were unavailing. Mention has already been made of the order of November 24 for the pooling of all available facilities on all roads east of Chicago. This order did involve "revolutionary measures," as claimed by the carriers, in comparison with their previous steps toward unification; but even this order fell far short of establishing "a continental railway system." More drastic measures were contemplated. Absolute embargoes were to be multiplied, and through the authority of the Fuel Administrator and the Priorities Director, the transportation service was to be practically restricted to the movement of war materials and supplies, coal, foodstuffs, and other absolutely essential commodities. But all these suggestions and plans came too late. A fundamental change in the war administration of the railroads was on the horizon.

The exercise of governmental authority could not be avoided. On December 5, 1917, at the height of the railroad crisis, the Interstate Commerce Commission transmitted to Congress a special report "with reference to transportation conditions as affecting and affected by the war in which the United States is now engaged." This report stated briefly and succinctly the essential elements of the railroad situation. The war had imposed upon the railroads a tremendous traffic burden. This burden must be adequately cared for: in order that the war may be brought to a successful conclusion, our systems of transportation must be "placed and kept on the plane of highest efficiency." Such efficiency can be secured only through unification. This unification can be established in one of two ways: either through unified operation by the carriers themselves, or through unified operation by the President under his war powers. If the first policy is adopted, the anti-pooling clause of the Act to Regulate Commerce and the Sherman Act as applied to railroads must be repealed, for the duration of the war, and the Government must provide financial assistance to the roads. If the second policy is adopted, a specific guaranty

must be provided to the roads for the use of their property while under government control.[9]

This analysis constitutes the chief substance of the special report of the majority of the Interstate Commerce Commission. The premises—that "it is necessary that our transportation systems be placed and kept on the plane of highest efficiency," and that "this can only be secured through unification of their operations during the period of war"—were unquestionably sound. But the conclusions of the Commission suggested the possibility that this unification might be effected by the carriers themselves, provided certain legal obstacles were removed and financial assistance were rendered by the Government. The decision of the national administration to resort to Federal Control was a rejection of this alternative of unified private operation through voluntary agreement. This decision was based in large measure upon the considerations urged by Commissioner McChord in his minority report. He argued that "our experience with railroad committees" justifies the belief "that no voluntary committee can accomplish what the situation demands"; that the element of self-interest, competitive activities, and established operating practices inevitably lead to the subordination of general transportation needs to the demands of private advantage; that "the unification of the present diversified governmental control" is essential; that this can be accomplished through the exercise of the presidential power to take possession and assume control of the railroads, or through the centralization of public authority over the regulation of railroad operations now vested in a number of agencies; that in either case "the strong arm of governmental authority is essential if the transportation situation is to be radically improved." [10]

In view of the growing intensification of transport difficulties, deliberation was short after this report of the Inter-

[9] Special Report of the Interstate Commerce Commission of December 5, 1917, reprinted in Thirty-second Annual Report, 1918, pp. 5-7.

[10] *Ibid.*, pp. 8-9.

state Commerce Commission was published. The President reached a swift decision. He elected to adopt the second of the alternatives suggested by the majority report, to rely upon the remedy of Federal Control primarily urged in the minority report. Accordingly, on December 26, 1917, President Wilson, by virtue of the authority vested in him and in face of the war emergency, issued a proclamation whereby, through the Secretary of War, he took possession and assumed control from twelve o'clock noon on December 28, 1917, "of each and every system of transportation and the appurtenances thereof located wholly or in part within the boundaries of the continental United States and consisting of railroads, and owned or controlled systems of coastwise and inland transportation, engaged in general transportation, whether operated by steam or by electric power, including also terminals, terminal companies and terminal associations, sleeping and parlor cars, private cars and private car lines, elevators, warehouses, telegraph and telephone lines and all other equipment and appurtenances commonly used upon or operated as a part of such rail or combined rail and water systems of transportation;—to the end that such systems of transportation be utilized for the transfer and transportation of troops, war material and equipment, to the exclusion so far as may be necessary of all other traffic thereon; and that so far as such exclusive use be not necessary or desirable, such systems of transportation be operated and utilized in the performance of such other services as the national interest may require and of the usual and ordinary business and duties of common carriers." For the time being, street electric passenger railways, including interurbans, were expressly excluded from the jurisdiction of Federal Control.

The President delegated his authority to William G. McAdoo, who was appointed Director-General of Railroads. The Director-General was instructed to perform his duties, to the extent that he may deem desirable, through the boards of directors, receivers, officers, and employees of the railroad companies, whose existence, identity, and operating machinery

were to be maintained in the usual way. The carriers were declared to remain "subject to all existing statutes and orders of the Interstate Commerce Commission, and to all statutes and orders of regulating commissions of the various states," but that all orders, general or special, thereafter issued by the Director-General "shall have paramount authority and be obeyed as such."

The presidential proclamation also provided for agreements with the carriers for the adjustment of the compensation to be paid them for the use of their properties. The Director-General was ordered as soon as possible to "enter upon negotiations with the several companies looking to agreements for just and reasonable compensation for the possession, use and control of their respective properties on the basis of an annual guaranteed compensation, above accruing depreciation and the maintenance of their properties, equivalent, as nearly as may be, to the average of the net operating income thereof for the three-year period ending June 30, 1917," the results to be reported to the President "for such action as may be appropriate and lawful," and the agreements not to "be deemed in any way to impair the rights of the stockholders, bondholders, creditors and other persons having interests in said systems of transportation or in the profits thereof, to receive just and adequate compensation." In the meantime it was provided that "regular dividends hitherto declared, and maturing interest upon bonds, debentures and other obligations, may be paid in due course"; that "such regular dividends and interest may continue to be paid" unless the Director-General shall order otherwise; and that, upon the approval of the Director-General, "the various carriers may agree upon and arrange for the renewal and extension of maturing obligations."

These stipulations comprehend the substance of President Wilson's railroad proclamation. The roads were taken over by the Government during the recess of the national legislature. On January 4, 1918, immediately after its reassembly, the President addressed Congress, explaining the character of the

circumstances which had led to the taking of this step which he deemed "imperatively necessary in the interest of public welfare," and suggesting the need of appropriate legislation, particularly of a financial character, for adjusting the relationship between the Government and the owners of the roads. This legislation, which constitutes the legal framework of federal railroad control, and which we shall describe and analyze in the following chapter, was enacted on March 21, 1918.

§6. *The Causes of Federal Control*

We have examined the salient facts which led to the substitution of Federal Control for private management. The causes of Federal Control are to be found in the whole complex of circumstances described in the preceding pages. It is necessary, however, to isolate, if possible, the fundamental or determining causes, in order that unwarranted conclusions may not be drawn from the forced adoption, in the war emergency, of the seemingly radical policy of government railroad operation. At the time of the transition to Federal Control, extreme interpretations, of conflicting character, were placed upon the event. There was a disposition to center the dominant responsibility either in the system of private ownership and operation as such, or in the system of government regulation as it had traditionally developed.

The proponents of public ownership saw in the breakdown of the railroad service during the winter of 1917, when its maintenance was of crucial national importance, conclusive proof of the inherent incapacity of our privately owned railroad system to function satisfactorily. In their eyes, therefore, Federal Control, though a war measure, implicitly involved far-reaching consequences; the resort to government operation during the war was the beginning of a system of public control which required only additional legislative authorization to be turned into permanent railroad policy. The critics of our sys-

tem of railroad regulation, on the other hand, imbued with an abiding faith in the efficiency and beneficence of unhampered private initiative, construed the same events as constituting a public recognition of the restrictive character and paralyzing effect of thirty years of interference with railroad enterprise by the Federal Government, and of the havoc wrought by the additional burden of conflicting state laws. The very necessity of greater centralization of governmental authority in the war emergency was regarded, in these quarters, as an augury of relief from governmental supervision upon the termination of Federal Control. A little reflection will indicate that neither view, in its extreme form, is justified by the facts. The railroad breakdown cannot reasonably or justly be saddled altogether upon the carriers (because of the defects of private management as such), or upon the Government (because of the shortcomings of public regulation). Both the railroads and the Government contributed to the result.

Responsibility for the inadequacy of plant and equipment, due to impaired railroad credit, must be shared by the carriers as well as by the public authorities. The situation was acute even before the extraordinary war burden was imposed upon the roads. Insufficient revenue, because of the repeated failure of the Interstate Commerce Commission to sanction rate advances, deprived the carriers of surplus earnings for additions and betterments, and weakened their credit position. But while restrictive railroad regulation, in the face of mounting costs and of increasing opportunities for speculative gain in private industry, undoubtedly rendered the task of attracting capital into transportation enterprise more difficult, those in charge of railroad policy intensified the difficulty by yielding too readily to the temptations of personal profit and corporate advantage at the expense of the public welfare. The methods employed were often "unlovely" and sometimes dishonest. The early manipulations, especially in the construction period, have never entirely lost their influence upon the public mind. They still serve as "horrible examples"; their fruit manifests

itself in deep-seated distrust and vigorous antagonism. The plea of the railroads to "let by-gones be by-gones," and not to jeopardize the effectiveness of the present transportation service because of resentment at past misdeeds, is entirely reasonable, and might prove acceptable, if the more recent practices of the carriers had been free from similar reproach. But the modern resort to "banker-management" is harmful alike to the transportation service and to the credit structure of the railroad companies; and the financial scandals of recent years —the New Haven, the Rock Island, and the Frisco inevitably come to mind—have added fuel to the forces which are destructive of confidence in private railroad operation, and contribute to the progressive impairment of railroad credit. The effect of these combined influences was the more keenly felt as railroad traffic was augmented by the extraordinary demands of war, and the insufficiency of plant and equipment reached the stage of acute public concern.

The inadequacy of transportation facilities was accentuated, also, by the resistance of shippers, especially a few of the stronger groups of shippers, to the abatement of special privileges in the use of railroad equipment that had grown up under our system of competitive railway management. The exigencies of keen rivalry for traffic had led to acquiescence by the railroads in demands of shippers clearly detrimental to the public service. Equipment was frequently detained for a much longer period than was necessary to unload it. Demurrage rates were low; demurrage rules were laxly enforced. There was a marked predilection on the part of the shipper, therefore, to use the freight car as a warehouse for storage purposes. The reconsignment privilege was widely abused by commission men, who came to depend upon the railroads to provide them with "business plants." This evil was so serious that even in normal times it probably constituted the greatest single cause of terminal delays. The effect was especially harmful during the war emergency, when increased efficiency through intensive utilization of inadequate plant and equip-

ment came to be a matter of prime public importance. The railroads' Commission on Car Service, by appealing to patriotic motives and enforcing stringent regulations, secured a high degree of coöperation, and achieved notable advances in breaking down the self-interest, obstinacy, and mere habit that constituted the groundwork of these objectionable service practices. But there was much inertia to overcome, and the results were never entirely satisfactory. In spite of many savings, as compared with the pre-war situation, plant and equipment were not used to maximum capacity until the Railroad Administration was clothed with mandatory authority under Federal Control. Responsibility for these difficulties must likewise be divided between the railroads and the Government. These extravagant privileges grew out of the early prodigality of competitive railway management. But in so far as extreme competitive rivalry was induced by express stipulations of legislative enactment or administrative order, undue reliance being placed upon the principle of competition in an industry naturally monopolistic, the source of the evil may be traced to a mistaken philosophy of public regulation. Moreover, the problem of service, always of incalculable public importance, had been largely neglected in our system of railroad regulation. Under the pressure of war, when the free and expeditious flow of traffic was the prime transportation task to be accomplished, the effect of this neglect (because governmental authority had been restricted, for the most part, to questions of rates and financial return) was felt very keenly and added substantially to the difficulties of private war administration.

The obstacles to railroad coöperation also find their source in both governmental restriction and railroad policy. The illegality of pooling and the prohibitions of the anti-trust laws definitely hampered the roads in their effort to secure the maximum of transportation efficiency through voluntary coöperation. The anti-pooling provision of the Act to Regulate Commerce and the competitive principle involved in the Sherman Act, as applied to railroads, represent very questionable

public policy even under normal conditions. Their essential incompatibility with the needs of war-time railroad administration was clearly recognized both in the majority report of the Interstate Commerce Commission and in the minority opinion of Commissioner McChord. The decentralization of governmental jurisdiction, which manifested itself in conflicting authority over car service, likewise rendered the task of the roads more arduous and diminished the effectiveness of their cooperative efforts. But the railroads did not avail themselves, promptly and energetically, of such powers as were lawfully vested in them and of such practices, though extra-legal, as received the informal sanction of the public authorities. The Railroads' War Board showed a marked reluctance to translate into concrete action the general professions of the resolution of April 11, 1917. The merely individual and competitive activities of the roads were accorded undue consideration. Radical changes in administration were postponed as long as possible. There was a concerted determination to discourage the assumption of authority by the Government in the administration of the roads; but this determination seemed to be unaccompanied by a willingness to take such measures as would render governmental action unnecessary. We have already noted that not until November 24, when railroad conditions had become critical and chaotic, were the first steps taken in the "revolutionary" program of the carriers.

But the primary cause of the breakdown in railway service in the winter of 1917, for which responsibility cannot be justly placed either upon the railroads or upon the Government, was the magnitude of the transportation task imposed upon the roads by the war situation. The essential facts have been reviewed. A vast increase of traffic, diversified in character and calling for expeditious movement and often for special facilities, concentrated to a large degree in a narrow strip of territory along the eastern seaboard, was suddenly thrust upon a railroad system scarcely adequate to meet the demands of normal industrial expansion. It is doubtful

whether the most honest, far-sighted, and efficient railway management, operating the roads under an unusually wise and intelligent system of public regulation, would have been equal to the occasion without undergoing radical reorganization. It seems as sound to accept the philosophy of "business as usual," in spite of war, as to expect the railroads to develop under normal peace conditions a transportation system capable of assuming the extraordinary burdens of a great war. Only a nation with a highly developed militaristic spirit, compelled by the hostility of surrounding powers to provide for the defense of its people, or bent upon aggression, would so develop its system of transportation as to be adequate, normally, to meet the traffic demands arising out of a great international conflict. Such preparedness is neither necessary nor desirable. A reasonable measure of surplus capacity, together with such flexibility in operating practice as to render the plant promptly responsive to growing industrial needs, are essential characteristics of all well-organized business units, in transportation as in other fields of economic enterprise; but the development of a permanent transportation structure designed to meet the needs of war would involve, aside from its harmful political influence, vast and intolerable economic waste.

The exigencies of war, therefore, inevitably demanded a reorganization of operating practice and the provision of administrative machinery for the special emergency. In the words of the Interstate Commerce Commission, the railroads "must be drawn, like the individual, from the pursuits of peace and mobilized to win the war." The problem of the winter of 1917, then, was largely one of method. Shall the war administration of the railroads be effectuated through voluntary private coöperation, or shall "the strong arm of governmental authority" be invoked for the purpose? Three important considerations, in addition to those previously set forth, led to the adoption of Federal Control.

In the first place, unity of operation was indispensable, and its complete attainment was incompatible with private opera-

tion. "It had become unmistakably plain," said President Wilson in his address to Congress of January 4, 1918, "that only under government administration can the entire equipment of the several systems of transportation be fully and unreservedly thrown into a common service without injurious discrimination against particular properties. Only under government administration can an absolutely unrestricted and unembarrassed common use be made of all tracks, terminals, terminal facilities and equipment of every kind. Only under that authority can new terminals be constructed and developed without regard to the requirements or limitations of particular roads." The mere suspension of restrictive legislation could not be relied upon to produce such unification; for the legal right to coöperate freely would not necessarily lead to the elimination of all the merely individual and competitive activities of the roads. Men are moved by patriotic motives in varying degrees. Voluntary service, in time of war, frequently proves itself as ineffective as it is inequitable. The conscription of man-power, through the adoption of the selective draft act, was grounded in sound principle and large experience. Unified railroad operation under private management, if successfully achieved, would involve financial sacrifices by some of the carriers. So long as the roads are operated for private profit, the conservation of corporate advantage constitutes a normal and reasonable objective of those charged with the tasks of management. The "traffic influence," because of the legitimate claims of self-interest, becomes sufficiently controlling to prevent or retard the subordination of private gain to the common need of transportation service. The obstacles to genuine unification thus assume menacing proportions. The urgent demands of the war situation could not be made to depend, for their fulfilment, upon the voluntary consent of the railroads to submerge their private interests. Unity of operation was a necessity; Federal Control made it an actuality.

The problem of financing the railroads during the war constituted a second important consideration in the transition

from private management to government operation. Even before the outbreak of war the status of railroad credit had been very weak. The traffic burden imposed by war demands created an immediate need for extensive additions to plant and equipment, and at the same time the ability of the roads to secure new capital was further weakened. Operating under the pre-war level of rates and charges, the railroads, in spite of the enormous growth of traffic and the highly favorable earnings of the year ending June 30, 1917, found it impossible to attract sufficient capital to meet their urgent needs. The war demand for capital was unprecedented and was taxing our financial structure. American investors had absorbed about two-thirds of the American securities that had been owned abroad prior to August, 1914. The railroad securities alone thrown upon the American market by foreign holders have been estimated at between $1,700,000,000 and $2,000,000,000. Extensive loans to the French and British governments had been financed in this country. The American people had already subscribed about $6,000,000,000 for liberty bonds, and this constituted but a beginning of our own government's financial operations. Moreover, the opportunities for extraordinarily profitable investment, especially in the war industries, were so great and so readily available that railroad securities, necessarily limited in income yield, made no appeal to such free capital as was seeking new commitments. The financial situation was no less critical than the operating problem. Government assistance was imperative. Because of the exigencies of its own financial operations, this assistance could be rendered more effectively through actual assumption by the Government of sole responsibility for the financial needs of the roads. While private corporations could not hope to compete successfully with the Treasury's drives for liberty loans, the Government could as ill afford to permit large private users of capital to urge their claims in competition with those of the nation. Coördination of financial effort was essential. The President rightfully stressed this point in

his address to Congress. "It is necessary . . . that the large financial operations every year necessary in connection with the maintenance, operation and development of the roads should, during the period of the war, be wisely related to the financial operations of the government." Again, "it is of the utmost consequence to the government itself that all great financial operations should be stabilized and coördinated with the financial operations of the government. . . . No borrowings should run athwart the borrowings of the federal treasury. . . ." From the standpoint, then, of both the railroads and the Government, the unification of financial operations was urgently necessary. Federal Control achieved the result.

Finally, Federal Control was calculated to relieve the labor situation. In the winter of 1917 the railroads were threateningly short-handed. Some of the carriers, in their returns to the Railroads' War Board, reported a net shortage of one-eighth of their entire labor force. Moreover, the percentage of labor turnover was becoming alarmingly great. The Pennsylvania Railroad, for example, was hiring more than four times the number of men usually employed in order to maintain its normal force. This constant withdrawal of railroad labor was due in part to the call of military service, but more especially to the lure of high remuneration, particularly in the war industries. The result was a decided lowering of the standards of railway efficiency. The employment of unskilled and inexperienced men, to fill the constantly recurring vacancies, proved as deleterious in its effect upon the service as the actual shortage of laborers. And the fact that the need of transportation efficiency was so urgent accentuated the problem. War-time control over men, to a larger extent even than control over economic resources, can be exercised most effectively through governmental authority. The machinery of the selective draft act was designed to institute such control, to mobilize man-power for the war effort. This mobilization was not restricted to the development of the military service. The maintenance and expansion of essential industries,

through the military exemption of needed personnel, was an integral element of the mobilization process. Railroad transportation is a key industry; its proper functioning is essential to the success of all industrial enterprise. The depletion or disorganization of the railroad labor force, therefore, would have constituted a very serious defect in the national utilization of man-power. The Government possessed ample authority to avert such a result, even under private management. But the direct governmental jurisdiction over railway employees resulting from Federal Control simplified the problem and facilitated its solution. Moreover, the Government was in a better position than the railroad corporations, to remove the general dissatisfaction that pervaded all ranks of railroad labor toward the end of 1917, and thereby to safeguard more effectively the continuity of the transportation service.

CHAPTER IV

FEDERAL RAILROAD CONTROL

We have traced briefly the chain of events in the latter part of 1917 which resulted in the assumption of control over our transportation system by the Federal Government, and we have examined the fundamental causes which made such action inevitable. It is the purpose of this chapter to analyze the Federal Control Act, to describe the organization of the United States Railroad Administration, and to review the principal policies and activities of the Administration during the twenty-six months of federal railroad control. An analysis and evaluation of the results of Federal Control will be reserved for the following chapter.

Federal Control became an actuality when Mr. William G. McAdoo, as Director-General, acting under authority vested in him by the President, took official charge of the roads January 1, 1918. Two things remained to be done in order that public operation might become definitely established, both in law and in fact. First, the proclamation of the President had to be incorporated in appropriate legislation. Second, an operating administration had to be organized. The Director-General set himself to the latter task immediately; it was not until late in March that legislation defining the relationship between the Government and the carriers was enacted. In describing these two phases of the initiation of Federal Control, we shall adopt the logical rather than the chronological order.

§1. *Analysis of the Federal Control Act*

On March 21st, 1918, Congress passed the Federal Control Act, "An Act to provide for the Operation of Transportation

Systems while under Federal Control, for the just compensation of their owners and for other purposes." The law recognized the action of the President in assuming control of almost our entire network of railroad properties, and provided that all railways engaged in general transportation as common carriers, except interurban electric lines, be considered as under Federal Control. The jurisdiction of the Government also included sleeping-car companies, refrigerator car lines, and the business of the express carriers as centered in the American Railway Express Company. Public authority extended, furthermore, to the utilization and control of inland and coastal waterways, although existing agencies of water transport were not formally taken over by the Government. The act recognized specifically "that the transportation systems are being operated under a unified and coördinated national control and not in competition."

The chief purpose, and much of the content, of the Federal Control Act was to provide compensation to the owners of the railroads for the use of their properties while under the management of the Federal Government. The adjustment of this compensation proved to be the problem of greatest difficulty in the framing of the act. As finally passed, it guaranteed a compensation to each carrier equal to its average annual railway operating income for the three years ending June 30, 1917. The President was authorized to make agreements with the individual companies guaranteeing this return to each of them for the entire period of Federal Control; provided, however, that if it were found that during a substantial portion of these three years the earnings of a particular carrier were for any reason abnormal, the President might make an agreement for such amount of compensation as he should deem just. In the event that no equitable figure could be agreed upon by the President and the carrier, the act provided that boards of referees should be appointed by the Interstate Commerce Commission, to hold hearings and fix the amount of compensation in accordance with their findings. Or finally, "failing such

agreement, either the United States or such carrier may file a petition in the Court of Claims, for the purpose of determining such just compensation." Pending the execution of the agreement, the President was authorized to pay to the carrier, at such times as might be desirable, a portion of the compensation, not to exceed each year ninety per cent. of the estimated amount of the annual return.

The three years selected as the test period were chosen for the purpose of obtaining a normal standard of railway returns. The year 1915 was a poor year for the railroads; in 1916, due to war traffic, the results were much better, and exceeded in some measure the normal condition of railroad earnings; 1917 was by far the best year, as regards earnings, that the railroads had experienced in their entire history. It was felt that the average earnings of these three years would give a reasonable basis of return, with the error, if any, on the side of generosity—where it should be. This average net operating income for the three-year test period—constituting the basis of the standard return guaranteed to the roads—amounted to approximately $905,000,000. The net operating income for the year 1917—the fiscal period immediately preceding Federal Control—was $974,778,000, exceeding by about $70,000,000 the amount of the standard return. But the objection was strongly urged that the result was too favorable to the roads.[1] The test period was an unusually prosperous one, and the con-

[1] The following comment voices this objection in vigorous language: "After the payment of all interest the railroads as a whole, under the proposed guaranty, would earn, net, approximately eight and one-half per cent. of all their capital stock outstanding; this includes the rich and the poor, water and all. Think of substituting for the six billions of dollars of railroad stocks in this country, six billions of dollars' worth of eight and one-half per cent. government bonds. . . . We are shielding the railroads from the effects of the war; we are protecting them from all advances in the cost of materials and in the cost of labor; we are guaranteeing the railroads their net income during the most prosperous three-year period since the steam engine was invented —regardless of what may happen to their expenses." Clifford Thorn, "Government Operation of American Railroads," *Annals*, March 1918, p. 87. See also Dixon and Parmelee, *War Administration of the Railways in the United States and Great Britain*, p. 135 (New Edition, 1919).

tract provisions were certainly not unfavorable to the carriers. It is the general opinion, however, that the policy of Congress, as recommended by the President and incorporated in the Federal Control Act, was a wise policy. The spring of 1918, at the very moment of the supreme effort of the German war machine, was not a time to antagonize any important group of citizens, or to deal grudgingly even with capital invested in a public service industry. Moreover, Federal railway administration was bound, in some measure, to have a harmful effect upon the roads. Under war conditions, deferred maintenance could hardly be avoided. Diversion of traffic, with its inevitable destruction of corporate good-will, was an essential condition of the unification sought to be achieved through Federal Control. Such reparation as the roads might be able to secure after protracted litigation could hardly offset immediate losses in physical efficiency and traffic influence. It seemed expedient, therefore, to guarantee such earnings to the carriers as would make possible a continuation of current dividend payments and the maintenance of current security values; and thus to provide, in addition, such assurance for other industries as would allay their fears of uncompensated expropriation.

But provision for compensation, while the most important item, was not the only matter, even of a financial character, covered in the act. It was stipulated also that all rental agreements should "contain adequate and appropriate provisions for the maintenance, repair, renewal and depreciation of the property," and the promise was made that the properties would be returned to their owners at the expiration of Federal Control in substantially as good repair and with as good equipment as when taken over. Furthermore, the act appropriated the sum of $500,000,000, which was to constitute, together with any earnings of the roads in excess of the annual compensation, a so-called Revolving Fund. Out of this fund the President was instructed to pay the expenses of Federal Control, the compensation of the carriers in so far as might be

necessary, and to "provide terminals, motive power, cars, and other necessary equipment." From this fund, too, advances could be made to carriers, to cover such necessary improvements and additions as the Government required them to make. Since one of the purposes of Federal Control was to eliminate competition between the private companies and the Government in financing their capital requirements, the issue of securities by the roads themselves was under the regulation of the President. Normal taxes, chargeable to the operating expenses of the roads, were to be paid out of revenue from transportation received by the Federal Government; but the burden of war taxes and of special taxes assessed after January 1, 1918, was to rest on the carriers, such taxes to be paid out of their own funds or deducted from their compensation.

The old methods of rate initiation and regulation were also modified. The act declared that the President might initiate and file with the Interstate Commerce Commission such rates and schedules as he deemed desirable, and that on complaint these rates might be reviewed by the Commission. But the Commission was shorn of its authority to suspend rates and charges pending a hearing. This change of procedure aroused protest from the shippers, who felt that their rights were thereby needlessly curtailed, and that as a result unfair charges might persist to their disadvantage during the generally prolonged interval pending investigation. The justification of the measure was simple necessity. Rates and revenues had to be increased at once on account of rapidly mounting costs of operation; and because of the extraordinary and constantly changing war conditions rate flexibility was highly desirable. In this, as in many other matters, the intimate relationship of the railroads to the public under Federal Control justified a departure from some of the safeguards deemed essential for the shipper and the consumer under private management.

Under the provisions of this act, "expressly declared to be emergency legislation enacted to meet conditions growing out of the war," our railroads were placed in the hands of the

United States Railroad Administration, and were operated by it for a period of twenty-six months. By the terms of the act itself, Federal Control was to terminate not later than twenty-one months after the ratification of peace, a period deemed sufficient by Congress for the transition to private operation, and for the enactment of such legislation as might then be necessary.

§2. *Organization of the Railroad Administration*

We may now examine the machinery set up by the Railroad Administration for the operation and control of the properties under its jurisdiction. At the head of the Administration, President Wilson had placed the Secretary of the Treasury, Mr. William G. McAdoo, as Director-General. The Director-General promptly proceeded to develop the new organization. Its principal elements will be described very briefly.

First, there was established at Washington a central administrative organization. Its work was divided among several bureaus or divisions, each with its own chief and staff. These bureaus included the Division of Finance and Purchases, the Division of Capital Expenditures, the Division of Operation, the Division of Public Service and Accounting, the Division of Law, and the Division of Labor. The general scope of the work of each of these divisions is indicated by its designation. In supreme control of the activities of all of these departments was the Director-General, assisted by Mr. Walker D. Hines, who later became his successor.[2]

It is to be noted that this organization into divisions was not created outright. It had received the form outlined above by the middle of 1918, and some further changes were introduced during the year 1919. New divisions were created by the subdivision of the old, and the division organization was given flexibility through the creation of new sections as the scope

[2] W. G. McAdoo, Report to the President, September 3, 1918, p. 6.

of activity of the Railroad Administration broadened. By the end of the Federal Control period the Division of Operation, for example, was supervising through its special sections such diverse matters as troop movements, the development of operating statistics, fuel conservation, engineering and maintenance, safety, secret service and police work, inspection and tests, and health and medical relief. Other divisions experienced similar, though less extensive, development. And closely connected with this central administrative machinery were many special committees, appointed from time to time as the need for them arose. To these bodies special phases of the work of the Administration, particularly matters relating to labor relationships, were specifically entrusted.

For the purpose of operation, the country was divided into seven so-called Regions, or rather, since geographical boundaries were not strictly adhered to, into seven groups of railroad systems. Each Region was put in the charge of a Regional Director, with a distinct operating staff. The names of these districts or regions—the Eastern, the Alleghany, the Pocahontas, the Southern, the Northwestern, the Central Western, and the Southwestern—indicate roughly the territory they covered. As in the case of the central divisions, the regional organizations were in constant process of change and development. At the beginning of Federal Control, three regions were defined—the Eastern, the Southern, and the Western. The others were created from time to time. Moreover, the original grouping of roads under the jurisdiction of the various regional directors was more or less mechanical and arbitrary, resulting in the division of a single road between two directors in some instances, and in other cases in the concentration of the management of two strongly competing companies in the same hands. These situations were gradually modified through regrouping of the lines. The position of the Regional Directors in the larger scheme of organization may best be stated in the words of the Director-General: "The Regional Directors are, of course, subject to the authority of the Director-

General at Washington, but as they are all men of experience and distinction as railway executives the policy is to give them large discretion and thereby free the members of the central staff for the more careful study of the important questions that come before them and the essential administrative work they must perform."[3] Under the Regional Directors were District Directors, in charge of sub-divisions of the regions, and Federal Managers, in charge of the actual operation of single railroads and groups of railroads. In most cases the former Presidents of the roads became their Federal Managers—a mere transfer of allegiance—and the operating organizations of the roads themselves were left practically unchanged.

This organization, as briefly outlined, was a relatively simple structure; but it is important to recognize that it was a structure superimposed upon the existing private railroad organization, rather than one designed to take its place. As stated by Director-General Hines before the Senate Committee on Interstate Commerce: "A great deal of misconception has arisen as to the amalgamation of railroad operating organizations. As a matter of fact the operating organization of every important railroad is preserved intact and the railroad could be turned back to-morrow or five years from now and still its operating organization would be available to carry on the business without interruption under private management."[4] The roads were not, as commonly believed, hopelessly "scrambled." For the most part each railroad was under separate management, and under the immediate direction of an official identified with it prior to Federal Control. These managers reported to the Regional Directors instead of to the corporate executives. Similarly, the corporate organization of the roads was uniformly maintained. The Railroad Administration merely separated operating and corporate functions. The Presidents and

[3] W. G. McAdoo, Report to the President, September 3, 1918, p. 17.
[4] Hearings on Extension of Tenure of Government Control of Railroads, Senate Committee on Interstate Commerce, 65th Congress, 3rd Session, Vol. I, p. 894. Hereafter referred to as Senate Hearings.

other officials of the railroad companies, except in so far as they were appointees of the United States Railroad Administration, were released from all responsibility for the operation of their properties. Those primarily and properly concerned with the corporate interests of the carriers were relieved of operating authority; those charged with the tasks of public operation were freed from allegiance to the individual roads.

It was fortunate that the Director-General was able to select his subordinates very largely from the best executives the railroad industry had developed. As a result, no sensible jar accompanied the transfer of the roads to public control—the fear of chaos and disorganization was entirely groundless—and a smoothly working administrative organism was very rapidly built up. This easy transition from private operation to Federal Control was due, in no small measure, to the great personal capacity of the first Director-General, and to his willingness to choose able subordinates as manifested throughout his incumbency of the chief executive post in the Railroad Administration.

§3. *Operating Activities of the Railroad Administration*

Before we pass on to an examination of the operating activities of the Railroad Administration, as distinct from its legal status and its administrative machinery, it is well to recall the central purpose of Federal Control. There is a marked tendency to disregard the special circumstances under which the railroads were taken over by the Government, and the special ends which public operation sought to achieve. The imperative demands of war constituted the effective cause of Federal Control, and all the activities of the Railroad Administration were necessarily, and properly, subordinated to the exigencies of war. Many things were done, and wisely done, which might deserve censure under normal conditions. A recognition of these circumstances must render pointless, to a large degree, much of the popular criticism of the Adminis-

tration's achievements. Undue stress may easily be placed, for example, upon the "unsatisfactory" financial results of Federal Control; such emphasis is unmindful of the fact that during the most critical portion of the period of Federal Control questions of cost and of revenue were relatively unimportant considerations as compared with the necessity of eliminating congestion and moving traffic.[5]

The tasks of Federal Control were largely determined by the character of the railroad situation in January, 1918. The outstanding difficulties, as described in detail in the preceding chapter, presented a very serious operating problem. The tremendous expansion of traffic had resulted in a virtual paralysis of the lines, especially in eastern territory, and had caused the roads, in many instances, to defer maintenance of equipment. During the fall of 1917, therefore, the constantly increasing volume of traffic was accompanied by a constantly diminishing supply of cars and locomotives in good repair. The abnormally severe weather conditions of December and January added to the difficulties of operation.[6] The heart of the problem was congestion of traffic. Among the more potent causes responsible for this congested traffic were the accumulation of export freight at North Atlantic terminals; the shortage of motive power, resulting in the continued use of locomotives in need of repair; the ordering of materials by government contractors in advance of ability to accept; the ordering of raw materials by industrial establishments in advance of their needs; the

[5] A single illustration at this point should prove helpful. "The only possible substitute, under these circumstances (inability to secure new locomotives), was to repair the existing locomotives, and even that meant, with insufficient man-power and insufficient shop facilities, working hundreds of thousands of hours overtime in order that we might make the old locomotives suitable as substitutes for the new ones we were sending to Pershing; and that cost us time and a half for overtime, and all of those hours are included in that cost of operation for 1918, when we were operating under most extraordinary and anomalous conditions." From cross-examination of Mr. McAdoo, Senate Hearings, p. 23.

[6] *Cf.* W. G. McAdoo, Report to the President, September 3, 1918, p. 13.

withdrawal of coast-wise shipping.[1] As a result, 62,247 cars were delayed, short of destination, in Trunk Line Territory; 31,421 at and west of St. Louis; 24,836 at and west of Chicago; 14,061 at and south of the Ohio River Gateways; and 15,548 cars at and south of the Potomac River Gateways. The car shortages at this time were equally serious, exceeding 100,000 at the beginning of Federal Control.

The Railroad Administration at once addressed itself to the problem of expediting traffic. The official reports for the year 1918 recite an endless list of means and methods employed to relieve the railroad congestion. Unfortunately there is a scarcity of data by which to judge each of the various expedients; it is enough that the cumulative result was a very noticeable improvement in the control of traffic and a reasonably satisfactory movement of all necessary freight. The principal devices employed to achieve this result will receive brief consideration.

The first order of the Director-General, under date of December 29, 1917, enunciated the general policy of the Government to operate all the transportation agencies as a unified system. It provided that all the railroads and other instrumentalities covered by the President's Proclamation "would be operated as a national system of transportation, the common and national needs being paramount to any actual or supposed corporate advantage"; that "all terminals, ports, locomotives, rolling stock, and other transportation facilities are to be fully utilized to carry out this purpose without regard to ownership"; that "the designation of routes by shippers is to be disregarded when speed and efficiency of transportation service may thus be promoted"; that "traffic agreements between carriers must not be permitted to interfere with expeditious movements"; that "through routes which have not heretofore been established because of short hauling or other causes, are to be established and used whenever expedition and efficiency of traffic will thereby be promoted." These provisions were

[1] See Annual Report of the Division of Operation for 1918, pp. 2-4.

foundational in character, and comprehended all the more detailed reforms instituted by the Railroad Administration during the twenty-six months of government operation.

The export situation created a problem in itself. Accordingly, an Exports Control Committee was established, whose chief function was to coördinate the movements and services of rail lines and overseas carriers. The Committee restricted movements of freight to congested ports until adequate shipping facilities could be provided, allocated traffic among the various ports on the basis of their ability to handle it promptly, and stimulated the flow of government supplies.

The shortage of motive power could not be quickly nor completely overcome. New construction, even under normal conditions, required many months of time; during the winter of 1917-18, with industrial enterprise organized on a war basis, the growing lack both of man-power and of productive capacity introduced well-nigh insuperable obstacles to swift provision of new equipment. The situation was but partially remedied, and largely through makeshift arrangements. Locomotives were leased from the Baldwin Works and from the War Department. Shop facilities for repair were energetically coördinated, permitting more prompt overhauling of locomotives in "off-line" shops. Motive power was relocated, as between the various roads, to meet the urgent needs of congested lines. Passenger traffic was curtailed, through the elimination of "unnecessary" trains, as a means of releasing motive power for freight service. As a result of these measures, some degree of improvement followed; but these direct efforts to overcome the shortage of motive power had to be supplemented by indirect methods of achieving the same end. Accordingly, many expedients were adopted, first, to check the traffic demands made upon the railroads, and second, to increase the effective utilization of such facilities as were available.

The traffic burden of the railroads was somewhat lightened through the efforts of the Administration to bring about

greater reliance upon waterway facilities for freight transport. Toward this end, the Marine Section attempted, with some success, so to regulate tonnage as to enable our depleted coastwise fleet to maintain its share of the essential traffic. Similar results were obtained through such devices as the Coal Zone System, which sought to prevent crosshauls of coal from one section to another and to encourage western coal mining. The further unification of priorities, under the Priorities Director previously appointed, with the consequent elimination of the wholesale use of "preference tags" by a multitude of government officials, was an undertaking analogous in purpose to these other methods of curtailing traffic demands.

Closely akin to these efforts to check the traffic burden of the railroads, was the tightening up of operating machinery for the purpose of increasing the work value of such facilities as were available. Terminals were consolidated, under Terminal Managers. Freight was routed to its specific terminal, to reduce interchange switching. Marine facilities in harbors like New York and San Francisco were unified, and their utilization coördinated with the most pressing railroad needs. Solid trains were made up at western points for eastern cities, and freight was detained until the conservation of facilities resulting from such procedure could be realized. For less than carload freight, the so-called "sailing day" plan was inaugurated—that is, package freight was held at important points until specified days of departure, to obtain through shipment in car-load lots. Moreover, freight was generally routed over the shortest line between the point of origin and the point of destination, regardless of custom, the desires of shippers, or the interests of the individual carriers.

By far the most important tasks of this character fell within the jurisdiction of the Car Service Section. The general function of this Section was to allocate the equipment of the roads to commercial and military requirements—to regulate car service, to expedite the transport of essential war materials, to gain the coöperation of shippers in conserving facilities. It

initiated a campaign for advance freight movements, in an effort to induce producers to obtain their supplies of raw materials during the summer months and thereby relieve the heavy winter traffic of 1918-19. It organized refrigerator and tank car sections, and coöperated with the Fuel Administration to meet the special problems of these types of transportation. It stimulated the conservation of carrying capacity through better and more careful loading, and induced shippers to expedite unloading, both by persuasive argument and by prohibitive demurrage rates.

But the two outstanding activities of the Car Service Section were car relocation and the establishment of the permit system. The prompt handling of important freight necessitated the movement of large numbers of empties to points of origin of essential traffic. During the year 1918 some 850,000 movements of empties were made for this purpose. Congestion was thereby lessened in the East and much needed cars were provided in the West. In essence the process of car relocation was but a pooling of equipment for use where most needed. It was rendered more effective in practice by the modification of car interchange rules and the abolition of per diem car rentals.

The permit system was an attempt to control the transport of essential freight. It was an outgrowth of the priorities plan. The granting of permits for the shipment of goods was calculated to prevent the routing of traffic to points where congestion was acute or to consignees unable to handle their shipments, and to clear the tracks for the transportation of essential government supplies. The permits exempted their holders from the operation of the many embargoes, general and special, that were widely enforced during the year 1918, and which were still being maintained, in some measure, at the beginning of 1919. These permits granted either general and continuing exemption from embargoes for essential commodities, or special exemption for particular shipments "as the needs of the individual consignee concerned and the public

welfare might demand." The Railroad Administration has testified that the permit system has fully justified itself, and that "to its successful operation is due in considerable measure the great improvement in movement which has been had under Federal Control."

From all this it appears that the primary means relied upon by the Railroad Administration for preventing congestion, in spite of a substantial increase in carrying power, was in effect a comprehensive system of embargoes, applied through many varied expedients. The traffic falling without the scope of these embargoes was rigidly restricted. The interests of particular manufacturers and shippers were ruthlessly subordinated to the needs of a difficult situation. It was a necessary and effective means, boldly entered upon and ably carried out, of meeting a grave public emergency. The fundamental inadequacies of our transportation system, in view of the unprecedented burdens placed upon it, were not completely overcome, and could not reasonably be expected to be overcome, by the mere transition from private management to public control. In large measure, these inadequacies were but shifted, in their effect, to such traffic as was least essential to the dominant purpose of the time. But the cumulative results of all these activities were noteworthy. We shall examine the details, quantitatively stated, in subsequent pages. At this point it is sufficient to note that the immediate crisis was adequately met, that the military ends of the Government were speedily forwarded. Congestion rapidly diminished, essential traffic was expeditiously cared for. The price of the service was a heavy one—not merely in money, but in the form of compulsory submission to radical interference with the normal currents of industry. Such costs must be discounted. War is the most expensive of human institutions; its justification lies in the greatness and the permanence of the cause for which its immeasurable sacrifices are made. Federal railroad control, with all its restrictions, was an essential part of the war process.

§4. *The Rate Advances*

We have been reviewing the chief operating activities of the Railroad Administration. Under normal conditions these matters are generally regarded as technical details of internal organization and management, possessing only an indirect bearing upon the public interest in the railroad industry. The heart of the so-called railroad problem is the problem of monopoly. The direct relationship between the railroads and the public has manifested itself predominantly, though not exclusively, in the adjustment of railway charges, both as to their absolute level and as to their relative burden upon different industries, different localities, and different persons. The primary object of railroad regulation has been to check the permanent tendency to monopoly prices and monopoly profits; to secure through conscious and deliberate public control, such results, as to rates and profits, as are believed to emerge automatically in competitive industry. In the past our system of railroad regulation has been restricted unduly to the function of rate regulation. But the adjustment of railway revenues to railway expenditures constitutes a permanent necessity of operation, whether under private or government control. The roads were not taken over as a fiscal monopoly, for the purpose of yielding profit; but neither was there any intention of supporting the transportation industry through governmental subsidy. As far as the demands of public policy would permit, railroad service, even under Federal Control, was to be provided on a *quid pro quo* basis. Accordingly, in view of the weak financial condition of the carriers, and as a result of the rapidly mounting costs of labor and materials, one of the unavoidable policies of the Director-General was to increase rates. General Order No. 28, increasing the level of railway charges, was issued May 25, 1918.

The rate advances imposed by this order were largely on a percentage basis. A flat increase in charges was enacted, no attempt being made to adjust arbitraries. The new schedule

called for an advance of 25 per cent. on all class rates, both intrastate and interstate, with the use of interstate rates between all points where such rates were published; an advance of from 15 cents to 75 cents per ton on commodity rates for iron, coal, and coke; an advance of 25 per cent. on other commodity rates, with a few exceptions, most of the schedules stating maximum increases in cents per hundred pounds; the cancellation of all export and import rates and the application of domestic rates to and from ports; the increase of all passenger fares to three cents per mile, except where higher charges were already in force; the discontinuance of special rates, as for excursion tickets, with unimportant exceptions; and an advance in charges for special services like Pullman facilities. These rates became effective in June, 1918,—passenger charges on the 10th, and freight rates on the 25th, of that month. The rate advances were designed to yield approximately a 25 per cent. increase in revenue.[8] No statement as to their actual productivity has been made by the Railroad Administration, but it is generally estimated that the increase in gross revenue resulting from the new rate level was about a billion dollars a year. No further advances were imposed during the period of Federal Control, and the reductions, resulting from the discontinuance of the special additional charge for Pullman service, and from rate decisions of the Interstate Commerce Commission, were relatively slight.

At the time of the promulgation of the rate order it was the hope of the Administration that the advances would prove sufficient to prevent a deficit. In subsequent testimony before the Senate Committee, Director-General McAdoo expressed the expectation that, under the more normal conditions following the armistice, a 1919 deficit would be avoided, and even gave encouragement to the hope that a rate reduction

[8] Director-General Hines has estimated that the rate advances averaged "about 18 per cent. as to passenger fares, excluding the extra charge in Pullman cars, which was discontinued in December, 1918, and about 28 per cent. as to freight rates." Report to the President for fourteen months ended March 1, 1920, p. 12.

might be possible. These hopes and expectations were doomed to disappointment. The most authoritative estimate now available places the aggregate railroad deficit during the twenty-six months of Federal Control at somewhat more than $900,000,000. Of this amount, the 1918 deficit absorbed but little more than $236,000,000. It appears, then, that the poor financial showing of the Railroad Administration cannot be altogether attributed to actual war conditions, that the situation became less rather than more satisfactory after the armistice, that about three-quarters of the discrepancy between operating expenses and rentals on the one hand and operating revenues on the other resulted from the operations of 1919 and 1920. On the surface the exhibit is rather paradoxical. These financial results, as already stated, will receive attention elsewhere. In this connection it is but necessary to recognize that the rate advances of June, 1918, were obviously inadequate to meet the situation. That the first Director-General was a poor prophet is not of prime importance; but unless the charge of gross inefficiency can be fixed upon the Railroad Administration, the presumption is almost conclusively established that railroad rates, under Federal Control, did not keep reasonable pace with costs of operation.

Further advances might have been made. Many urged such a policy, in order to free the taxpayers of the burden of the growing deficit. Agitation for additional rate increases was especially strong during the closing months of Federal Control. But the Railroad Administration withstood this pressure, and wisely so. The roads were about to be returned to their private owners. A blanket rate increase at this juncture, without careful investigation and without reference to the conditions of their return which were still in process of formulation, would have served as a poor foundation for the impending readjustment under private management. Moreover, living costs, throughout the year 1919 and during the early part of 1920, were becoming intolerably high; an increase in railroad rates, as past experience had frequently

demonstrated, was likely to impose a heavier burden upon the consumer than the deficit which was to be effaced by such increase. The railroad deficit was therefore regarded as a war cost by the Government and recouped through general taxation. The sum of $900,000,000, while very large in itself, did not constitute a disproportionate share of the total war expenditures, exceeding twenty billions of dollars, in view of the great importance of the service rendered by the railroads and the admittedly low level of rates paid by the Government for that service.

There has been but little serious criticism of the rate advances. Such objections as have been raised are based on the ground that the method of increase, a flat percentage advance, tended to destroy existing rate arbitraries, unbalance the rate structure, and create much local and commodity discrimination. The criticism is essentially sound. The procedure adopted can be justified only by the exigencies of the immediate situation. But it is to be noted that many of the maladjustments were rectified by subsequent review. The following statement of Director-General Hines, in his final report to the President, indicates the nature of the difficulty, and the way in which it was met:

"When the increases in freight rates were made in 1918 earnest efforts were made to avoid as far as possible disturbances of existing rate and business relationships. It is obvious that no general increase in rates can entirely escape such disturbance. If the increase is on a percentage basis it makes a greater change in the number of cents per ton or 100 pounds in one case than it does in the case of some competitive traffic. If the increase is a number of cents per 100 pounds it correspondingly varies the percentage relationships. No method, no matter how carefully planned, can do more than minimize such disturbances; it can not eliminate them. As illustrating the magnitude and difficulty of the problem, the result of the general increase in freight rates made in 1918, despite the careful effort to minimize disturbance of prior relationships, brought about so many requests for revisions that 33 traffic committees sitting in various parts of the country have been occupied

nearly all the time for about a year and a half dealing with these matters, and over 20,000 freight-rate authorities have been issued to make changes to eliminate or improve unsatisfactory adjustments. About 79% of these changes in rates have been reductions." [9]

§5. *The Wage Increases*

Closely allied to the question of rates is the question of wages. The compensation of employees constitutes much more than one-half of the total operating expenses of the railroads. During the year 1917, immediately preceding the period of Federal Control, the aggregate compensation of railroad employees was in round figures $1,718,000,000, out of a total operating expenditure of $2,858,000,000, or approximately 60 per cent. In the railroad industry, therefore, the mounting costs of operation which accompanied our participation in the Great War were to manifest themselves in large measure through a substantial rise in the wage level. The rate advances of June, 1918, were made in anticipation of inevitable wage increases, and the revenue derived therefrom was largely absorbed by the wage increases which actually followed.

In the face of war conditions, a substantial increase in railroad wages could hardly be avoided. First, and most important, was the inherent justice of the men's demands. Living costs were rapidly rising; real wages, as distinct from money wages, were as rapidly falling. Then, there was the alternative of profitable employment in the war industries. While the extraordinary wages of temporary employment under war conditions should not serve as a basis of permanent wage adjustments for railroad employees, the fact of this easy outlet for railroad labor made the task of maintaining the railroad organization difficult. Finally, there was the paramount necessity of uninterrupted service. It is now universally recognized that continuity of service is the first essential of public

[9] *Ibid.*, p. 27.

welfare in the field of transportation, even under normal conditions. In so far as past regulative effort has spent itself on rate adjustments and financial arrangements, to the virtual exclusion of any attempt to establish a satisfactory relationship between the railroads and their employees, it has proved short-sighted and unintelligent. In a grave public emergency, interruption of railroad service is unthinkable. It is true that under Federal Control the men were virtually government employees engaged in a war enterprise. On grounds of patriotism and loyalty the thought of strike and tie-up seems a slander upon American citizenship. But in the face of sufficient provocation, even such an eventuality was not impossible. Moreover, under war conditions, demoralization of the service, though short of actual discontinuance, would have constituted a serious public danger. Without a friendly, cooperative relationship between the Railroad Administration and the railroad employees, the mobilization of American productive energy would have been seriously jeopardized.

In view of these circumstances, General Order No. 27, providing for increases in wages for railway employees, was issued by the Railroad Administration the same day the order initiating rate advances was published. Unlike the rate advances, these wage increases, in conformity with the promise of the Director-General at the beginning of Federal Control, were retroactive, for the most part, to the beginning of the year 1918. (This fact, it may be noted, is one of the "extenuating circumstances" frequently cited to explain the 1918 deficit.) As early as January 18, 1918, a Railroad Wage Commission,[10] with Franklin K. Lane as its chairman, had been established by the Administration, to investigate the wage conditions of railroad employees, the wage levels in other indus-

[10] The members of the Commission were Franklin K. Lane, Secretary of the Interior; Charles C. McChord, of the Interstate Commerce Commission; J. Harry Covington, Chief Justice of the Supreme Court of the District of Columbia; and William R. Willcox, formerly chairman of the New York Public Service Commission for the First District.

tries, and the extent of the increase in living costs, and to recommend principles of wage adjustment. The report of this Commission, made April 30, 1918, was the basis of the wage order issued by the Railroad Administration.

The order contained detailed schedules of wage increases for men employed on a monthly, daily, and hourly basis respectively.[11] The starting point for computing these increases was the compensation received for the same work in December, 1915. The general purpose of the wage order, as officially expressed, was to establish a just level of compensation for railroad employees, particularly in face of the changed living conditions resulting from the war. Any intention to meet the temporary high wages of war employment was specifically denied. "These increases," testified Director-General McAdoo, "were fixed not upon the theory that the railroads, a permanent industry, should compete in prices paid labor with the transient war industries, many of which paid very high wages in order to attract labor. Rather the effort was made to find a just and equitable basis which would outlive the war and which would give a living wage and decent working conditions to every railroad employee."[12] The form and method of the wage increases disclosed a further significant aspect of the policy of the Railroad Administration. Labor

[11] The following is a brief summary of the details of these wage increases:

Monthly Basis. Wages below $46 were increased $20 a month. Wages ranging from $46 to $238 per month were increased on a scale of descending percentages, varying from 43 per cent. for those at the $46 level, to 4.56 per cent. for those reaching $238. Wages from $238 to $249 per month were increased to $250.

Daily Basis. Day rates were granted flat increases. These ranged from 77 cents per day on the lowest wage levels (from 75 cents to $1.80 per day), to a maximum increase of $1.30 on an old wage of $3.30 a day, then gradually decreasing to a 65 cents raise as the highest ranges of day wages were reached.

Hourly Basis. These increases were based on the same general plan as the advances in daily wages. Beginning with an increase of 9¼ cents per hour for the lowest rate (10 cents), they increased to a maximum advance of 16¼ cents per hour for the medium ranges, and then diminished to zero as rates approached $1.20 per hour.

[12] Senate Hearings, p. 18.

was standardized and employment was classified. Negotiations were conducted and adjustments made, not with individuals, but with groups. The principle of collective bargaining was frankly accepted.

The first order, substantially an enactment of the Lane Commission report, was followed by a number of supplements, based on the recommendations of the Board of Railroad Wages and Working Conditions. The object of these later orders was to readjust the wages of specific classes of labor (for example, shop and maintenance of way employees and clerks), and to provide for employees not taken care of in the first order (for example, agents and operators, policemen, dining and sleeping car employees). In large measure these supplements may be regarded as part of the original wage increase. In addition, there were new increases in response to the demands of organized labor. The most important increase of this character was granted in April, 1919 (retroactive to the beginning of the year 1919), to the enginemen and trainmen. There were also further equalization adjustments, by way of time and one-half for overtime and otherwise (especially for shop employees, enginemen and trainmen in road freight service, maintenance of way employees, and clerks), and important wage demands were pending on March 1, 1920, when the roads were returned to private management.

It is virtually impossible to state with accuracy the aggregate amount of the wage increases during the period of Federal Control. With constantly changing traffic conditions, with sharp variations in the number of men employed during different periods of government operation, and with the gradual shortening of the working day as the pressing demands of military need disappeared, the extent of the wage increases, as such, can be ascertained only through estimate, and with great difficulty. The latest available estimate was submitted by Director-General Hines in April, 1920, to the House Committee on Appropriations. He placed the "annual increase in

pay rolls chargeable to operating expenses on account of General Order 27 and supplements thereto" at $965,000,000.[18]

§6. *Status of Federal Control After the Armistice*

In presenting a description and analysis of the principal activities of the Railroad Administration, we have been necessarily diverted in some degree from the primary purpose of tracing historically the leading events of federal railroad control. We now revert to the chronological sequence. In order to complete our brief résumé of the essential facts of Federal Control, we shall note, first, the changed status of the Railroad Administration after the armistice, and second, the outstanding developments of the year 1919 and after.

During the year 1918 the organization of the United States Railroad Administration was completed, and its methods and expedients for meeting the most pressing problems of that year were developed. The abnormal traffic was moved with reasonable expedition and success; the need of increasing revenue was satisfied in some measure by the rate advances; and labor was effectively placated through the wage increases and the generally conciliatory attitude of the Administration. With the armistice, however, came new problems. While the task of demobilization at home and provision for our expeditionary forces abroad left the question of military traffic still a vital one, the cessation of hostilities introduced additional difficulties. It became increasingly hard to maintain the machinery of Federal Control at the highest level of efficiency, and there emerged a marked, and often unreasoning, disposition on the part of the public to insist upon the immediate restoration of normal railroad conditions.

At the very beginning of the year Mr. McAdoo vacated his post as Director-General of Railroads. Since Mr. Hines,

[18] Hearings before Sub-committee of House Committee on Appropriations in charge of Deficiency Appropriations for the fiscal year 1920 and prior fiscal years, Sixty-sixth Congress, Second Session, pp. 193, 210.

his assistant, a very capable executive of large experience, was appointed to succeed him, this change would scarcely have operated to weaken the Railroad Administration. But other executives, high in authority, began to fall away from the Railroad Administration. There were many resignations of men whose service had been motivated to a large degree by patriotic considerations. In this respect the Railroad Administration was merely undergoing the experience of most of the boards, bureaus, councils, and commissions that had sprung up in Washington in the course of the war, but its effect upon administrative competence and continuity was none the less real. The organization which had drawn to itself some of the ablest railroad men and had secured from them the highest degree of loyalty began to disintegrate. During the course of the year 1919 no less than six new Directors of Divisions and two new Regional Directors were appointed. Moreover, the railroads themselves, whose corporate existence and identity had been maintained throughout, began to look forward to the private management of their properties, and their coöperation was neither as freely nor as completely accorded to the Railroad Administration.

In like manner, there was a striking change in public attitude which made the task of the Administration a more difficult one. The extreme character of many of the war-time restrictions, in all fields of industrial activity, led to an equally extreme reaction, once the pressure of actual hostilities was removed. The clamor for relaxation of restrictive arrangements became wide-spread and insistent. A strong anti-government sentiment began to emerge on all questions involving public interference with private industrial relations. As the time and opportunity for positive action approached, the importance of constructive policy came to be subordinated, in large measure, to the demands for speedy compromise and adjustment, loudly voiced in the most influential industrial and financial circles, on the ground that the swift restoration of normal business conditions was the only means of quick-

ening American initiative for the great economic tasks of the future. The forces at play in the American domestic forum were not essentially different from those which turned the international settlement from many of the high purposes and professions that had given moral character to the period of actual conflict. In relation to the railroads, these currents of public opinion manifested themselves in a growing dissatisfaction with government railway operation, and in a demand for the speedy return of the roads to private management. The inadequacies of our transportation system—largely a pre-war heritage, though doubtless accentuated by the strain of the war burden—were readily accepted as evidence of the failure of Federal Control. The chief task of the new Director-General, therefore, was to help restore normal conditions: to provide, as far as possible, adequate transportation service for a shipping and traveling public of impatient temper, whose general attitude was hostile to the Railroad Administration. Mr. Hines was early impressed by the changing status of Federal Control, and recognized the necessity of modifying the policies of the Administration. He expressed his conviction to the Senate that "a new era opened for the Railroad Administration with the signing of the Armistice."[14]

Yet another set of circumstances help explain the changed status of Federal Control after the armistice. The war had furnished the background for the activities of 1918. A new background set its impress upon the tasks of the following year. During the first few months of the "new era" a widespread interest in railway affairs swept over the country. Shortly after the armistice Director-General McAdoo suggested the extension of Federal Control for a period of five years, in order to test the efficiency of unified operation and

[14] *Cf.* the following: "While the former director-general was given charge of the railroads for the purpose of getting the highest degree of efficiency out of them for war purposes, and while he assumed the additional burden of trying to revolutionize and reform them at the same time, Mr. Hines' job has been that of trying to restore normal conditions and to render an adequate transportation service." *Railway Age*, January 2, 1920, p. 64.

the desirability of public control under normal conditions. In this program he was supported by the new Director-General. A storm of protest at once arose. And when, in January, the Senate began its hearings on Mr. McAdoo's proposal, numerous "plans for the solution of the railroad problem" began to pour in from all parts of the country, and from every conceivable interest likely to be affected by the railroad readjustment. Throughout the year, the formulation of plans, the writing of proposals, and the drafting of bills continued. It was this atmosphere of public discussion, looking eventually to the restoration of the railroad properties to their private owners, and to the redrafting of our policies of railroad regulation, that constituted the characteristic background of the events of 1919 and after. Aside from the usual brief comment when the monthly statements of the railroad deficit were published, or an occasional notice of the protests of shippers disgruntled by the service, the Administration received relatively little consideration in the daily press, in the current periodical literature, or on the public platform. The "railroad problem," as such, was discussed widely and intensively; but all eyes were turned toward the future, and the experience of the Railroad Administration, whether in 1918 or in the then immediate present, was looked upon as a thing apart in the formulation of permanent railroad policy. Public opinion seemed definitely crystallized against Federal Control. Whether as a result of mere prejudice, or on the basis of mature judgment, our experiment with public railroad operation was very generally regarded as an isolated experience calculated to meet the special needs of an extraordinary emergency. The fact of wide-spread and continued discussion of railroad matters, with a view to the resumption of private management by the carriers, together with the generally adverse complexion of public opinion with regard to Federal Control, exerted a powerful effect upon the operation of the roads. In the light of these circumstances, let us note briefly a few of the more important developments of 1919 not already

considered in our discussion of the activities of the Railroad Administration.

§7. *Developments of 1919 and After*

The first necessity of the new Director-General was money. The Revolving Fund of $500,000,000, appropriated in March of the preceding year by the Federal Control Act, had been entirely exhausted by the time he assumed office. The deficit for 1918, amounting to upward of $236,000,000, still remained to be paid, and extensive capital expenditures were deemed highly essential. Accordingly, estimates were submitted to Congress in January calling for an appropriation of $750,000,000. In spite of the Administration's urgent need of funds, Congress failed to respond. The strain of war had been relaxed, and politics began to exert an increasingly dominating influence in Washington. A number of appropriation bills, and other pending measures, failed of enactment before Congress adjourned, but the denial of the request of the Director-General, though necessarily a mere postponement, was the most flagrant of the Congressional acts of omission. The consequent delay in obtaining funds hampered the Railroad Administration seriously in its operations for 1919. Projected plans for important additions and betterments were entirely discarded or radically curtailed, orders of much needed equipment failed of placement, and the Administration was subjected to a financial stringency not conducive to the prosecution of vigorous policy or the maintenance of high efficiency. When Congress reassembled the estimated needs of the Director-General had been increased to $1,250,000,000, and finally, in June, 1919, the sum of $750,000,000, the amount previously asked for, was appropriated. There was no further appropriation till the enactment of the Esch-Cummins Act, which carried the sum of $200,000,000 for the winding up of Federal Control.

From the standpoint of management, the speedy restoration

of normal conditions was the Administration's primary task. Toward this end, many changes of policy were introduced. In so far as the exigencies of the demobilization period would permit, steps were taken to prepare the transportation system for the impending relinquishment of Federal Control. This involved the abandonment of such of the policies and activities of the previous year as had been designed to integrate the railroad system and unify its operation. The roads were allowed greater freedom in the choice of standards for their equipment. Efforts were made to restore locomotives and rolling-stock to the lines that owned them. Rules for interline waybilling were sufficiently modified to permit an approach to the old practices. Demurrage rates were reduced to prewar levels. Per diem car rentals were reëstablished. Advertising on a small scale was resumed. Furthermore, steps were taken looking toward the "unscrambling" of the various lines. As far as possible, such parts of systems as had been separated from their parent organizations in the 1918 grouping of railroads were restored to the systems to which they naturally belonged; and efforts were made to effect a separation of such of the old competitive lines as had been entrusted to the administration of the same Federal Managers. The creation, in the early part of the year, of a Division of Public Service, was designed to further the same general purpose of preparing the roads for the resumption of private management. This new Division was instrumental in improving the strained relations existing between the Railroad Administration and the state commissions and the shipping and traveling public. An *entente cordiale* was successfully promoted with the state bodies. While war-time jurisdiction over intrastate rates was retained by the Administration to the very end of Federal Control, the Director-General gradually relinquished all authority over local matters not involving rate adjustments to the state commissions. And even in the field of rates, many liberal modifications of the schedules promulgated under the rate order of May, 1918, were made with the help and concurrence

of the commissions, and these changes resulted in a marked improvement in the relationship between the Administration and both the state authorities and the general public.

In conclusion, we may set down briefly the legislative developments that preceded the termination of Federal Control and served as a basis for the resumption of private operation. On May 20, 1919, the President definitely announced that the railroads would be returned to their owners at the end of the calendar year. This announcement served to place the problem of enacting necessary railroad legislation formally upon the Congressional docket. The numerous plans and proposals for the coming readjustment began to crystallize into bills. These bills—with the single exception of the Cary bill, stimulated by the activities of the Public Ownership League of America—concerned themselves with the modification of the principles and machinery of public regulation under a restored system of private management; there was little sentiment in support of public ownership or control as a permanent railroad policy. Then the summer months saw the meteoric rise and fall of the Plumb Plan, incorporated in the Sims bill, which was sponsored by the railroad brotherhoods. The Plumb Plan created a deep impression throughout the country. Overnight, it brought the alternative of public ownership into the arena of practical politics. Moreover, it offered a platform of public ownership constructed by labor, and in many of its most characteristic planks largely for labor. Compared with its bold and vigorous aims, most of the proffered legislation was "timid tinkering." The country was startled into an extraordinary interest in the railroad problem. The plan was eulogized by some as the most far-reaching measure of constructive economic reform arising out of the war; and it was stigmatized by others as an attempt to "contaminate the American industrial structure by an insidious infusion of revolutionary bolshevistic doctrine." But the heaviest batteries were against the plan. Public opinion was bent upon the restoration of normal conditions; there was

little appetite for radical experimentation. As the months passed, therefore, the propaganda for the Plumb Plan, in spite of the warm adherence of organized labor, spent itself. In the early autumn it had become perfectly clear that the new railroad legislation would but attempt to strengthen our traditional system of regulation under private management.

The Esch bill in the House, and the Cummins bill in the Senate, representing organized Congressional opinion and commanding the legislative machinery of both chambers, were early recognized as the probable basis of the new railroad legislation. Although the two bills differed radically in many of their essential provisions, both foreshadowed the general character of the impending readjustment. They were given wide publicity and were subjected to much discussion. Finally both bills, with numerous amendments, received the almost unanimous approval of their respective houses—the Esch bill on November 17, 1919, and the Cummins bill on December 20, 1919—and were referred to a joint conference committee for the reconciliation of their differences. These differences were vital and fundamental. They concerned methods of winding up the affairs of Federal Control; the advisability of establishing a Transportation Board; the question of guaranteeing railroad returns; the problem of compulsory consolidation of railroad systems; the wisdom of declaring railroad strikes to be illegal; and the formulation of machinery for the peaceable settlement of disputes between railway employees and the carriers. The task of the conference committee was an arduous one. In the meantime, as the end of the year approached, it became evident that no legislation could be enacted before the time set by the President for the return of the roads to their owners, and the period of Federal Control was extended to March 1, 1920. The conference report was submitted to Congress February 18. In view of the magnitude of the issues involved debate in both houses was unreasonably brief. Compromise was accepted as the only available tool, and the report of the joint committee was assumed to have incor-

porated the maximum of attainable demands of both House and Senate. Accordingly, the Esch-Cummins bill, without alteration, was speedily passed by decisive majorities—in the lower house on February 21, and in the upper house on February 23. There followed determined opposition by organized labor, and its protest was formally submitted to the President. The American Federation of Labor, the four great railroad Brotherhoods, and the Farmers' National Council specifically requested that the bill be vetoed. The President waited till February 28. He then affixed his signature to the new legislation, despite the vigorous disapproval of organized labor, and the Esch-Cummins Act became law. On March first the railroads were restored to private management.

CHAPTER V

THE RESULTS OF FEDERAL CONTROL

In the preceding chapter we sketched briefly the salient facts constituting the history of federal railroad control. Such interpretation of these facts as has previously fourd expression in these pages was merely incidental to the description of the essential characteristics of the undertaking. But our task is not complete. We must now undertake an analysis of the results of the experiment, and attempt the formulation of a judgment as to its success or failure.

These results may be studied from two standpoints. We may seek to determine how far Federal Control succeeded in carrying out the purposes for which it was created, or we may attempt to discover the significance of the undertaking in the development of permanent railroad policy. Since the Government assumed control of the railroads as an emergency measure, with the avowed object of meeting the exigencies of war conditions, the permanent significance of the effort possesses only a secondary or indirect importance. The immediate problem, therefore, becomes one of determining how far the United States Railroad Administration succeeded in accomplishing the ends which made its creation desirable.

What were the purposes that animated Federal Control and guided the activities of the Railroad Administration? In the words of the first Director-General, as announced in his personal "Declaration of Policy," these purposes were:

"First: The winning of the war, which includes the prompt movement of the men and material that the Government requires. To this everything else must be subordinated.

Second: The service of the public, which is the purpose for which the railways were built and given the privileges accorded them. This implies the maintenance and improvement of the railroad properties so that adequate transportation facilities will be provided at the lowest cost, the object of the government being to furnish service rather than to make money.

Third: The promotion of a spirit of sympathy and a better understanding as between the administration of the railways and their 2,000,000 employees, as well as their 100,000,000 patrons, which latter class includes every individual in the nation, since transportation has become a prime and universal necessity of civilized existence.

Fourth: The application of sound economies, . . ."[1]

Federal Control should first be tested, then, on the basis of its success in moving the abnormal traffic of the abnormal years 1918 and 1919. For that purpose, primarily, it was instituted.

§1. *The Movement of Traffic*

The fiscal year ending June 30, 1913, was, up to the period of the war, the heaviest traffic year in railroad history. During that year the roads transported over 300 billion ton miles of freight—an increase of approximately 14 per cent. over the traffic of the preceding year, and of nearly 19 per cent. over the year 1911, which is deemed to represent fairly normal traffic conditions. In comparison with these figures, the tonnage moved by the carriers during the war period reached tremendous totals. The two years following 1913, because of the initial influence of the European war, saw a falling off in the unprecedented 300 billion ton mileage; but once the industrial stimulus of war conditions made itself felt, traffic figures began to mount by leaps and bounds. The calendar year 1916 accomplished the movement of 366.1 billion ton miles of freight; in 1917, the ton mileage rose to 398.2 billion; in 1918, it increased to 403.1 billion; and in 1919, in spite of

[1] Reprinted at the end of Director-General McAdoo's Report to the President, September 3, 1918.

the serious lull in business activity during the early months following the armistice, the ton mileage was about 363 billion, according to the figures of the Railroad Administration. It thus appears that 1918, the peak year, saw a traffic increase of about 59 per cent. over the normal pre-war burden, and of more than 33 per cent. over the highest pre-war traffic. While these figures provide striking evidence of the magnitude of the transportation burden under Federal Control, it is necessary, further, to note the accomplishments of the Railroad Administration in dealing with specific traffic problems.

The most characteristic war problem faced by the Railroad Administration was the movement of troops. During the course of our participation in the war, approximately four million men were called to the colors and about one-half this number sent overseas. Upon the railroads devolved the task of moving these men from their homes to points of mobilization, thence to training camps, and ultimately to ports of embarkation. This movement, begun in April, 1917, was suddenly halted by the armistice, only to give place to no less a task during the following year—that of demobilization. To organize the handling of this vast traffic, the Administration took over and remodeled into a Troop Movement Section, the Committee on Military Passenger Tariffs of the Railroads' War Board. The annual reports of this Troop Movement Section furnish the following data.[2] From January 1, 1918, up to the signing of the armistice, 6,496,150 men were transported by the railroads—an average of 625,434 a month. The maximum number of men moved in one month was 1,147,013—the record of July, 1918. A great part of this traffic required special trains and special facilities, which taxed the passenger resources of the railroads to the utmost. Some 40 per cent. of these troops were moved in Pullman equipment, and more than 9,000 special troop trains were operated. Low speeds were consistently maintained, and as a result only fourteen

[2] Annual Reports of Division of Operation, Troop Movement Section, 1918, p. 42 *et seq.*; 1919, p. 31 *et seq.*

accidents were recorded, involving thirty-six deaths. Following the armistice, the Troop Movement Section began immediately to lay plans for the task of demobilization, which was commenced early in December. The reports for the year 1919 show that troop movements still offered serious passenger traffic problems. In that year (including, also, December, 1918), 7,009,476 men were moved, with a record of only seven accidents and two deaths. The maximum amount of equipment required at any one time to handle this traffic was approximately 1,500 Pullman coaches, 2,500 passenger cars, and 500 baggage and express cars. From April, 1917, to November 30, 1919, covering the entire period of mobilization (and hence including nine months of private railroad operation) and practically the full period of demobilization, 15,724,058 men were moved. This task necessitated the operation of 25,103 special trains, and the use of 327,930 cars—279,106 passenger cars (including sleeping cars), 22,300 baggage cars, and 26,524 special freight cars for troop impedimenta. One of the most marked achievements of the Railroad Administration was the prompt, efficient, and exceptionally safe handling of troops. The work of the Troop Movement Section has been accorded unqualified praise.

Next to the movement of troops, the transportation of food and food products was of prime importance. The successful movement of foodstuffs, especially for European export, is rightly emphasized in the reports of the Railroad Administration. During the first months of 1918 the railways were unable to maintain the program of movement declared by the Food Administration to be the necessary minimum. Once the system of preference freight was established, however, the situation was gradually relieved, and by March 15 the available vessel capacity of the allied nations had been satisfied and a surplus of foodstuffs ready for loading accumulated. Director-General McAdoo, in his testimony before the Senate Committee on Interstate Commerce, spoke of these accomplishments in dramatic words:

"The food situation in the allied countries of Europe became extremely critical in February last (1918), representations being made by Great Britain, France, and Italy that unless the program of food deliveries promised by the Food Administration (1,160,000 tons per month) was kept pace with, Germany and her associates inevitably would win the war. While the facts could not be told at the time because of the possible effect on the morale of the nations fighting the central powers, it was nevertheless true that according to official word received from the entente allies, the outcome of the war depended upon the ability of the American railways to transport sufficient supplies of foodstuffs to the Atlantic seaboard for shipment abroad. This problem was met. It was no time for half-way measures. The safety of the world hung in the balance. Empty box cars were rushed from all portions of the east, south, to the southwestern grain states. Conflicting traffic of all kinds was held up. Every facility of the Railroad Administration and of the railroads under its jurisdiction was thrown into the balance. Officials and employees worked day and night. The result was magnificent. By March 15, the vessel capacity of the allies had been satisfied and there was available at North Atlantic ports an excess on wheels of 6,318 carloads of foodstuffs exclusive of grain on cars and in elevators. Since that time there has never been any danger of the American railways failing to transport the necessary amount of food supplies for Europe. It perhaps is not too much to say that this was one of the turning points of the war." [8]

But the movement of troops and the supply of foodstuffs do not exhaust the transportation problems involved in the conduct of modern warfare. Vast amounts of essential freight must be carried if the industrial processes which constitute the necessary support of the military establishment and of the civilian population are to be maintained. Our chief industrial necessity is coal. In the fall and winter of 1917, due largely to the inadequacy of transportation facilities, a serious coal famine threatened. Indeed, it was more than a threat, as all who remember the "Heatless Mondays" and the unlighted streets of that winter can testify. During the year 1918 the Railroad Administration met the problem of moving the coal

[8] Senate Hearings, p. 8.

tonnage with a considerable degree of success. For the first ten months of the year, the net increase in the number of coal cars furnished to mines, as compared with the preceding year of record production, was 741,666—providing an approximate capacity for 37,083,300 tons. As a concrete instance of this improvement in coal transport, it may be noted that 28,153,317 tons of coal were moved to Lake Erie ports during the navigation period of 1918, as compared with 26,826,000 tons in 1917, and much smaller amounts in previous years. Throughout the first half of 1919 the decline in industrial activity eliminated freight congestion; hence there was no necessity of further intensification in the use of equipment, and cars were available for all the coal that was mined. Indeed, during February and March there was an average daily surplus of coal cars exceeding 180,000. But the nation-wide strike of bituminous coal miners in November again rendered the situation very difficult. In order that coal might be hauled to all parts of the country from the Pennsylvania and West Virginia fields that still remained in operation, much other traffic was discontinued and consistent preference was accorded to coal movement. When the strike was terminated, the railroads again proved themselves able to carry all the coal required. Immediately before the coal strike, by transporting 13,200,000 tons in a single week, a new high record for coal transport was established.[4]

With regard to the handling of general freight offerings, less can be said for the efforts of the carriers under Federal Control. The permit system produced its inevitable results. "Essential" freight was, for the most part, adequately and promptly moved; freight considered "non-essential" had to take its chances. This policy worked hardship on many producers. The official acknowledgment that a differentiation was necessary between essential and non-essential commodities, that such a device as the permit system had to be resorted to, suggests in itself some qualification on the complete success

[4] Annual Reports, Division of Operation, 1918, pp. 4, 5; 1919, p. 7.

claimed by the Government from the standpoint of operation. Responsibility ought in justice to be placed upon the inadequacy of our transportation system, in face of the extraordinary demands of war. But this important fact must not be neglected: the roads were unable to handle all the traffic before they were taken over by the Government, and this inability was not altogether overcome during the critical months of Federal Control. The success of the Railroad Administration on the traffic side was based, in no small measure, on its superior powers for restricting traffic, and on its improved facilities for determining what traffic to refuse.

But the Railroad Administration did make very substantial advances in relieving the paralyzing freight congestion of the closing months of 1917, and in moving through the year 1918 an ever-increasing proportion of the tonnage that demanded carriage. The accumulation of loaded cars in excess of current movement was reduced from 144,539 on January 1, 1918, to less than 40,000 by November 22. The more serious phases of the congestion of the preceding winter had been overcome by May 1 of that year. The Car Service Section, by authorizing the movement of some 850,000 empty cars during 1918, and by its wholesale pooling of equipment, was able to reduce car shortage from 148,000 reported November 1, 1917, to a condition of surplus by the middle of October of the following year. The year 1918, therefore, was on the whole one of substantial accomplishment in the movement of general traffic.

In the months immediately following the armistice traffic problems receded into comparative insignificance. During the first half of 1919 the nation experienced a marked decline in business, threatening serious industrial depression. Railroad traffic fell off correspondingly. By March there was an unprecedented surplus of nearly 500,000 cars. During the first six months of 1918 the average ton-miles of freight carried per mile of road per day was 4,977. In the following year the corresponding figure had decreased to 4,266, a decline of about

14 per cent. The total year's tonnage shows a decrease of about 10 per cent as compared with 1918. Only two months of the year 1919—January and October—placed a greater traffic burden on the roads than the corresponding months of 1918. In spite of these facts, the problem of car shortage was still vital. By the summer months business activity—and railroad traffic—had begun to revive, and by October the figures for car shortage had reached about 60,000. The increase in deferred maintenance of equipment induced by the earlier surplus, the lack of appropriations for new orders of equipment, and the unexpected expansion of traffic during this summer period, were largely responsible for the shortage. Throughout the fall, the traffic situation was more or less difficult, and the two great strikes of the year, the steel strike of September and October and the coal strike of November, added much to the embarrassment of the operating division of the Railroad Administration. At no time, however, did the problems of general traffic movement assume the critical aspect they had presented during the preceding year.

When all the facts are considered, therefore, the conclusion seems warranted that the Railroad Administration succeeded in moving all essential traffic with reasonable efficiency and expedition, and that the restrictions upon general transportation were reduced to a minimum, in view of the imperative character of the war demands. The inconvenience resulting from restricted service, elimination of shipping privileges, enforcement of priorities, and establishment of freight embargoes was comparatively insignificant in the light of the outstanding fact of the actual carriage of an unprecedented tonnage of indispensable commodities. From the standpoint, then, of the first and most important basis of judgment—the effectiveness of the Railroad Administration's efforts in the movement of traffic as an essential adjunct to the national military machine—the record of Federal Control was a decidedly creditable one.

§2. *The Question of Operating Efficiency*

Underlying this estimate of success, other fields of investigation open. Granting that Federal Control was an effective instrumentality for the movement of traffic, the question arises as to how this success was attained. "Increased efficiency of operation" is the answer given or suggested in the reports of the Railroad Administration. This official claim deserves careful examination. To what extent was railroad operating efficiency increased through the establishment of Federal Control?

The position of the Railroad Administration may be analyzed somewhat as follows. The successful movement of traffic, especially for the year 1918, might be attributed to three distinct factors: to additions of plant and equipment; to greater efficiency on the part of railroad labor; to more effective utilization of existing plant and organization. Railway plant and equipment did not increase materially during the first year of Federal Control. The productive capacity of industrial enterprise was devoted to supplying war needs; new cars and locomotives were not to be had. The efficiency of labor was impaired rather than improved, through the withdrawal of skilled and experienced men to enter military service, or to take advantage of the high wages paid in the war industries. Increased operating efficiency, then, was the primary basis of the results achieved under Federal Control. Because of the urgent necessity of increasing hauling capacity, and because new equipment could not be readily secured, resort was had to more intensive use of existing facilities. The unification of all the railroad properties under a single control made such gains practicable. Among the methods employed were short routing of freight, heavier loading, insistence upon through movements by solid trains, reduction of passenger service. The results of these efforts, for the year 1918, were statistically stated by Director-General McAdoo, in his testimony before the Senate Committee, as follows:

"The operating results may be summarized briefly: The railroads, during the first ten months of Federal control, produced 1.9 per cent. more ton miles with a decrease of 2.1 per cent. in train miles and a decrease of 5.8 per cent. in loaded car miles. The average trainload increased from 655 tons to 682 tons, a gain of 4.1 per cent.; and the average carload increased from 26.8 to 29 tons, a gain of 8.2 per cent." [8]

These and similar figures are found in most of the reports of the Administration. They are intended to provide statistical evidence of its success in increasing the efficiency of railroad operation. The figures themselves are accurate and reliable, but the official conclusions drawn from them are frequently too sweeping. They but reflect the general disposition of the Railroad Administration to launch rather large claims in support of the effectiveness of its activities. This attitude may be explained, in part, by the fact that, almost throughout its entire existence, the Administration functioned under a heavy fire of criticism. It is unfortunate that in large affairs the element of controversy should dominate so extensively, destroying the perspective of all concerned. The matter now at issue has not been altogether free from such influences. How significant are these evidences of increased efficiency?

From the standpoint of operating efficiency, the accomplishments of the Administration must be compared with the achievements of private operation during the earlier war years. The freight traffic carried by American railroads in 1916—when war demands first made themselves felt extensively—was 366.1 billion ton miles. In 1917, the ton mileage rose to 398.2 billion, an increase of almost nine per cent. These enormous traffic burdens were carried during the period of private operation. In 1918 the ton mileage reached the peak figure of 403.1 billion; but this was an increase of less than two per cent. over the 1917 traffic. And during the first

[8] Senate Hearings, p. 14.

ten months of 1918, the period covered in the Director-General's statement, freight traffic increased but 1.9 per cent. as compared with the corresponding months of 1917. We have already accorded due credit to the Railroad Administration for having moved with reasonable success the traffic offerings of 1918—for decreasing congestion and car shortage, and for transporting essential commodities, through the preference plan, with earnest and intelligent concern for the primary national needs. It does not appear, however, that the actual increase in transportation service rendered in 1918, as compared with the preceding year of private operation, was enormous. Nor was the increase in locomotive, car, and train efficiency either startlingly impressive in extent or very permanent in duration. Moreover, the Director-General himself, in the same testimony in which he directs attention to the evidences of increased operating efficiency now under discussion, notes that "The increase in traffic in 1918 was accomplished by the use of approximately 3.4 per cent. more freight locomotives than in 1917. Compared with 1916 the 1918 increase in freight cars was 6.9 per cent. and the increase in freight locomotives was 2.4 per cent."[6]

An interesting presentation of the other side of the case is furnished in the statement of Mr. Julius Kruttschnitt, President of the Southern Pacific Company, before the Senate Committee. It will indicate the sort of criticism to which the Administration was subjected, and the danger of exaggeration of relatively unimportant details. Mr. Kruttschnitt, unfortunately, selects the first nine months of Federal Control as his basis of comparison, setting against them the "nine months of unified private control" ending January 1, 1918. Essential excerpts from this testimony follow:

"The volume of freight traffic measured by tons of freight carried 1 mile in the nine-month period was, in 1917, 330,486,-

[6] *Ibid.*, p. 14.

760,286, or 1.3 per cent. greater than in 1918, when it was 326,306,832,131; and the maximum volume of freight traffic handled in any one month was in May, 1917, 39,273,449,624, or 1.3 per cent. greater than in July, 1918, when it was 38,761,290,750.

"The sole items in which 1918 shows improvement over 1917 are in average tons of freight per car of 29 against 27.3, an increase of 6.2 per cent. for the period; but for the month of December, 1917, at the end of nine months of private unified control, the average per car was 29.2 tons, and the corresponding figure for September, 1918, after nine months of Government unified control, was but 29.7 tons, and in average trainloads, which in the two periods was 667 and 678 tons, respectively, an increase of 1.6 per cent., but as the increase in carload was 6.2 per cent. a less number of loaded cars per train was hauled.

"A press dispatch in the New York *Times* of January 2, 1919, credits to the Railroad Administration an estimate of the operating expenses of 1918 at $3,800,000,000, or $1,000,000,000 more than 1917. This expenditure was made to increase efficiency; nevertheless roads that are alleged to have been run down at the end of nine months of unified private control show:

1. A larger volume of freight traffic handled in nine months under private than in the same period under Government control.
2. The largest volume of freight traffic ever handled in any one month.
3. Loaded-car mileage 7.5 per cent. larger than under Government control.
4. Greater number of loaded cars per train than under Government control.
5. Miles run per locomotive per day 7.2 per cent. higher than under Government control.
6. Miles run per freight car per day 6.1 per cent. higher than under Government control.
7. The physical condition of freight locomotives better than under Government control.
8. The condition of freight cars equally as good as under Government control.

"As weather conditions, both at the end of 1917 and the beginning of 1918, were unusually severe, the comparison of the two nine-month periods is not unfair.

"Whence it follows that increased efficiency under Government control is, to say the least, not proven."[7]

Whether or not we accept all of the assumptions and deductions of the preceding analysis, the following conclusion seems warranted: that the extraordinary gains in operating efficiency frequently prophesied for Federal Control and occasionally suggested in the reports of the Railroad Administration did not materialize during the first year of governmental effort. A consistent increase can be noted in average car and train loads; but the increase was not appreciably greater than the gain in these respects under unified private operation. There is no justification for the charge of lack of efficiency under Federal Control; but caution must be exercised against unduly enthusiastic interpretations of such gains as were actually realized. The question of economy in car mileage through short routing provides an excellent illustration. The first Director-General reported that by this means alone some 16,863,633 car miles were saved during the first year of Federal Control in the Eastern and Northwestern regions. This seems a very tangible accomplishment; but the significance of the result becomes relatively unimportant in view of the fact that this saving amounts to but two-tenths of one per cent. of the total car mileage of these regions. The Railroad Administration has erred more frequently in over-statement than in under-achievement.

The experience of the year 1919 provides confirmation of our general conclusions with regard to the question of operating efficiency; and many of the gains attained in 1918 were not realized in the following year.[8] This was due to the par-

[7] Senate Hearings, pp. 558-560.

[8] See *Railway Age*, January 2, 1920, p. 66: "For the eleven months ended November 30, the net ton miles per loaded car averaged 27.8, as compared with 29.2 during the corresponding period of 1918, and 26.9 in 1917. This, naturally, had a tendency to pull down the record for increased train loading, but for the eleven months' period the average net ton miles per train mile still showed an increase from 682 in 1918 to 693 in 1919. In the corresponding period of 1917 the average was 656. The average car miles per car per day for the eleven months' period was only 23.2 as compared with 24.8 in 1918 and

tial or complete abandonment of many of the special reforms instituted during the first year of Federal Control. Some of the Administration's policies were recognized as practicable and appropriate only under the stress of actual war. Accordingly, there was a marked recession from insistence upon elimination of passenger trains, restrictions upon the routing of freight (the short haul principle), campaigns for heavy loading and prompt release of cars, and imposition of abnormally high demurrage charges. In other cases, the war policies were reversed in order to ease the impending transition to private operation. Thus per diem rentals were resumed, efforts were made to relocate equipment and centralize repair work on the owning line, the taboo upon advertising was removed, and an attempt was made to regroup the roads more nearly in accordance with the old competitive systems. In a very few cases, reforms were abandoned because of inherent defects. On this ground, it is believed, the "off-line" freight agencies were reëstablished. Not all of the policies of the Railroad Administration, therefore, proved themselves applicable to normal operating conditions.

Unified public control necessarily created opportunity for considerable advances in operating efficiency. For the most part the Railroad Administration availed itself of such opportunity, and a consistent increase in the important figures of performance was achieved. But the gains were not startling. Moreover, some of them were obtained through curtailment of railroad service and denial of transportation privileges which would not be readily tolerated under normal conditions, while others were dependent upon a spirit of public coöperation which only the patriotic impulse of a grave national emergency can nourish effectively. The fact that the traffic of the war period was moved satisfactorily constitutes the decisive evi-

26.6 in 1917, but this average was brought down by the large number of idle cars in the early part of the year. For October the average was 27.3 as compared with 26.0 in October 1918, and 25.9 in October 1917." For more complete statistics of operation. see footnote following, at the end of the section.

dence of the reasonable operating efficiency of the Railroad Administration.[9]

§3. *Rates, Wages, and Economies of Management*

We have attempted to evaluate the results of Federal Control with respect to movement of traffic and efficiency of operation. These considerations naturally suggest the query as to the "cost" at which the results were obtained, and direct the investigation to the financial aspects of Federal Control. Two actions of the Railroad Administration—the advance in rates and the increase in wages—affected the railway balance sheet to a greater extent than any others. The administrative details

[9] In order that the latest complete figures of operating performance may be available, for the purpose of comparing efficiency of operation during the period of Federal Control with the results obtained in 1916 and 1917, the following table, from the Report of the Division of Operation for 1919 (p. 40), is presented:

CLASS I ROADS UNDER FEDERAL CONTROL

(Those with annual operating revenues over $1,000,000)

FREIGHT AND MIXED TRAINS

Item	1919 (10 Months)	Calendar Year		
		1918	1917	1916
Miles of road operated	230,775	229,597	228,956	228,334
Train miles (thousands)	471,733	639,650	656,002	642,606
Freight car miles (thousands)				
Loaded	11,773,693	14,945,914	15,856,011	15,801,084
Empty	5,485,210	7,120,378	6,728,158	6,722,671
Total	17,258,903	22,066,292	22,584,169	22,523,755
Freight cars on line	2,449,275	*2,445,346	*2,368,518	*2,294,769
Tons carried, revenue and nonrevenue (thousands)	*1,847,570	2,496,673	2,483,573	2,394,940
Net ton miles, revenue and nonrevenue (thousands)	328,792,002	437,603,420	428,284,143	394,426,984
Miles per ton freight (average haul)	178.0	175.3	172.4	164.7
Net ton miles per mile of road per day (traffic density)	4,687	5,222	5,125	4,720
Net ton miles per train mile (trainload)	697	684	653	614
Net ton miles per loaded car mile (carload)	27.9	29.3	27.0	25.0
Per cent loaded to total car miles	68.2	67.7	70.2	70.2
Car miles per car day	23.2	24.7	26.1	26.8
Net ton miles per car day	442	490	495	470

* Estimated.

of both measures have already been discussed. It remains to examine their effect on railway finances; to estimate, as accurately as may be, the financial significance of the rate and wage advances.

We have seen that the rate advances under Federal Control were confined to a single order, issued May 25, 1918, authorizing a general increase of approximately 25 per cent. in freight and passenger tariffs. There is no certainty as to the total annual proceeds of this rate increase. Neither the published statements nor the official reports of the Railroad Administration attempt an estimate of this figure. Unofficial estimates, however, place the gross addition to operating revenues resulting from the rate advances at approximately one billion dollars. This figure is confirmed, roughly, by the statement of Director-General Hines, in his report of March, 1920, that some $494,000,000 would have been added to the gross revenue for 1918, had the rate advances become effective on the first of January, instead of in June, of that year. Disregarding variations in extent and character of traffic in the two six-month periods, the increase for the entire year, on this basis, would amount to $988,000,000.

While we have not yet reached our formal analysis of the financial outcome of the Federal Control period, the fact of the deficits should be here noted, because of their bearing upon the adequacy of the rate advances. The financial aspect of these advances involves not merely a consideration of their gross effect upon operating revenues, but an examination of the circumstances which prevented a further increase sufficient to absorb the deficits. For the year 1918 alone, the deficit was in excess of $236,000,000; for the entire period of Federal Control, the aggregate deficit, by the latest available estimate, amounted to slightly more than $900,000,000. By the beginning of 1919 the growing discrepancy between revenues and expenditures indicated the inadequacy of the existing rate level. The hope of a railroad surplus, and of a possible decrease in rates, held out by Mr. McAdoo, was based, as events

very swiftly proved, upon an entirely unjustifiable optimism.[10] The business depression and light traffic of the first six months of 1919 resulted in a hopeless maladjustment between revenues and expenditures. As a consequence, the Railroad Administration began to be subjected to severe criticism for imposing upon the taxpayers the burden of these deficits. The obvious remedy was to increase the income of the railroads through further rate advances; but Director-General Hines persistently, and wisely, refused to resort to an increase in rates as a means of achieving a favorable financial showing for the Railroad Administration.

This decision was based on weighty considerations. In the first place, the increasing deficits could be explained, very largely, by reference to special and unusual circumstances. The entire deficit for the year 1918, and a substantial proportion of the "loss" suffered in 1919, would have been wiped out, if the original rate advances (like the wage increases) had become operative at the beginning of Federal Control, on January 1, 1918, instead of late in June of that year. For a period of almost six months the Railroad Administration was compelled to meet the increasing costs of operation without any advance whatever in the pre-war rate level. Sound policy could not justify the imposition of a current burden in order to eliminate accrued deficiencies. The difficulty was further accentuated by the abnormal business depression of the first six months of 1919. It seemed neither wise nor practicable to formulate a general rate increase in face of the uncertainties of this transitional period. The rapid expansion of business activity during the next four months, between July and October, vindicated the judgment of the Director-General in this respect. A relatively slight increase in the rate level at that time would have been sufficient to meet the operating expenses of the roads and the standard return guaranteed by the Government. The results of November and December were likewise abnormal, the very unfavorable financial show-

[10] Senate Hearings, p. 23.

ing for these months being due largely to the business paralysis and operating difficulties resulting from the great coal strike. The extraordinary conditions of the greater part of the year 1919, therefore, rendered a permanent modification of the rate level both difficult and undesirable.

Furthermore, a general rate increase, as we have noted in our discussion of the original rate order, leads to inevitable maladjustments in the rate structure. It is sound policy to avoid, as far as possible, disturbance of existing rate relationships, particularly in a difficult period of transition; these rate relationships exert an important, and frequently a controlling, influence upon the character and direction of industrial activity. And the interests of the consuming public also cautioned restraint. Prices continued to rise during 1919, in spite of (perhaps because of) the termination of actual warfare. The burden of high living costs was becoming intolerable. An advance in railroad rates, because of the disproportionate increase in commodity prices which generally follows, was likely to produce a heavier public burden than that removed by the consequent reduction in taxation. The real railroad "loss," from the standpoint of the public, might thereby be augmented rather than diminished.

Finally, the resumption of private operation was impending. The authority of the Railroad Administration to increase rates was limited to provision for railroad operating expenses and rentals "under a unified and coördinated national control and not in competition." It was without the scope of the authority of the Director-General to formulate such a rate readjustment as would render the carriers self-supporting after the return to private operation. Since the financial demands of the roads under private operation would not necessarily be identical with those essential to render Federal Control self-sustaining, particularly since the legislative foundation for the return of the railroads was yet undetermined, additional rate advances would probably have proved necessary after the termination of Federal Control, even if the Administration had attempted to re-

move its deficits by increasing its revenues. The industrial disturbance which generally accompanies such readjustments of the rate level would thereby have been prolonged and intensified. "Clearly it was much more in the public interest," argued Director-General Hines, "to have one general rate adjustment for the purposes of private control than to have, in addition, an intermediate one for the purposes of Federal Control."

We may now pass to the financial aspects of the wage adjustments. We have seen that there have actually been not one, but many, wage increases. The first and most comprehensive of these was authorized in May, 1918. Following the issue of this order, there came a series of supplements, affecting readjustments and allowing further advances. Since a modification of the wage scale had been promised the railroad employees at the beginning of Federal Control, the initial wage order was made operative from the first of the year, and a majority of the subsequent advances were likewise made retroactive for a period of months. As a result of the various supplementary wage increases, the scope of the original order was so broadened that a so-called "war cycle" of wage advances was completed, whereby practically every railroad employee was benefited. At this point the President and Director-General Hines, although confronted with additional pressing demands, postponed all further action pending the return of the roads to their private owners. In view of our purpose, it would be a long and needless task to examine the administrative details of these wage adjustments. Our interest, in this connection, is centered upon their gross effect on operating expenses.

It is impossible to state with exactness the increase in operating expenses which resulted from these various wage advances. The number of railroad employees is constantly changing, as the volume of traffic varies from month to month; the number of hours of work rendered by these employees is likewise in constant process of change, depending upon the pres-

sure of traffic demands, the exigencies of operating conditions, and the character of the working agreements currently in force; and the wage scales themselves had been somewhat unstable. Resort must therefore be had to estimates. While there is considerable variation in the estimates concerning the financial extent of the wage increases during the period of Federal Control, the most reliable data now available are those furnished by Director-General Hines to the House Committee on Appropriations in April, 1920.[11] According to the estimate then presented, the gross result of the war cycle of wage increases was an addition of $965,000,000 annually to the operating expenses of the railroads.

By comparison with pre-war standards, this wage increase imposed a vast burden upon the carriers. Such an addition to operating expenses in 1915, or in any earlier year, other con-

[11] Hearing before Subcommittee of House Committee on Appropriations in Charge of Deficiency Appropriations for the fiscal year 1920 and prior fiscal years, Sixty-sixth Congress, Second Session, p. 210:

ESTIMATED ANNUAL INCREASE IN PAY ROLLS CHARGEABLE TO OPERATING EXPENSES ON ACCOUNT OF GENERAL ORDER 27 AND SUPPLEMENTS THERETO

	Employees Affected	Effective Date	Estimated Annual Increase in Pay Roll, Chargeable to Operating Expenses
General Order 27 (substantially recommendation of Lane commission)	All employees receiving less than $250 per month	Jan. 1, 1918	$360,000,000
Supplement No. 4	Shop employees	do	209,000,000
Supplements 7 and 8	Maintenance of way employees and clerks	Sept. 1, 1918	190,000,000
Supplement 13	Agents and operators	Oct. 1, 1918	25,000,000
Supplements 14, 17 and 18	Policemen, dining and sleeping car employees	Jan. 1, 1919	8,000,000
Supplements 15 and 16	Enginemen and trainmen	do	60,000,000
Increase in pay under equalization adjustment effective May 1, 1919	Shop employees	May 1, 1919	50,000,000
Time and one-half for overtime allowed	Enginemen and trainmen in road freight service.	Dec. 1, 1919	38,000,000
Time and one-half for overtime and other adjustments in pay	Maintenance of way employees	Dec. 16, 1919	25,000,000
	Clerks	Jan. 1, 1920	
Total			$965,000,000

ditions remaining unchanged, would have absorbed the entire net revenue of the railroads. As a result of this increase, the percentage of gross revenue paid to railroad employees in wages jumped from 43.3 per cent. in 1917 to 53.3 per cent. in 1918 and 53.6 per cent. in 1919. The percentage of operating expenses consumed in railway wages increased from 61.15 in 1917 to 65.0 in 1918, and amounted to 62.04 for the year 1919, according to the figures of the Railroad Administration. The increase in absolute amount of compensation paid to railroad employees further emphasizes the enormous extent of the wage advances. The annual payroll for Class I roads increased, in round numbers, from $1,134,000,000 in 1915, $1,336,000,000 in 1916, and $1,730,000,000 in 1917, to the vast totals of $2,581,000,000 and $2,744,000,000 (partly estimated) for the two years of Federal Control.[12]

It becomes clear, then, that the item of wages constitutes the most important single element in the operating expenditures of the railroads, and that the justice and necessity of the wage increases must serve as the determining factor in any analysis of the financial results of Federal Control. If the wage increases, in the aggregate, were necessary and justifiable, the propriety of the rate advances cannot be questioned. If these rate advances proved insufficient to cover the added outlays resulting from the wage increases, then, in the absence of proved operating inefficiency on the part of the Railroad Administration, and in view of the inadvisability of further rate advances during the period of government operation, the fact of the financial deficits is largely explained. The aggregate deficit for the twenty-six months of Federal Control was less by about $65,000,000 than the amount of the annual wage increases. As far as finances are concerned, therefore, the question of wages is the key to the problem.

The wage increases have not been universally accepted as just and necessary, and the Railroad Administration has been subjected to severe criticism for its wage policy. For the most

[12] *Ibid.*, p. 193.

part, however, the opposition dates back to the earlier months of Federal Control. And the source of this opposition is to be found, very largely, in the fear of the railroad executives that the Government's labor policy would result in the return of the roads to their owners with established precedents of high wages, short hours, standardization of employment, and extensive organization. Even if such an outcome had been inevitable, the attitude of the Government would none the less have been justified as a means of meeting the necessities of the war emergency. In fact, however, subsequent developments have indicated that the establishment of a higher wage level for railroad labor was a reasonable response to the permanent demands of the industrial situation. It has become increasingly evident that the wages paid in the railroad industry were not disproportionately high, in view of the increased burden of living costs, and that the railroad wage level had not advanced disproportionately as compared with the movement of wages in other industries.

At the beginning of Federal Control railroad labor was decidedly underpaid. The situation was a very menacing one, and substantial wage increases would doubtless have been granted by the carriers themselves if private operation had continued. The Lane Commission, on the basis of whose investigation and report the initial wage order of the Railroad Administration was formulated, presented convincing evidence in support of the urgent need of wage advances. "It has been a somewhat popular impression," reported the Commission, "that railroad employees were among the most highly paid workers, but figures gathered from the railroads dispose of this belief. Fifty-one per cent. of all employees during December, 1917—that is, more than a million employees—received $75 per month or less, and 80 per cent. received $100 per month or less. Even among the locomotive engineers, commonly spoken of as highly paid, a preponderating number received less than $170 per month, and this compensation they have obtained by the most compact and complete organization,

handled with a full appreciation of all strategic values. Between the grades receiving from $150 to $250 per month there is included less than 3 per cent. of all the employees (excluding officials), and these aggregate less than 60,000 men out of a grand total of 2,000,000." [13]

The real purpose of the wage increases was not to meet the competition of transient war industries, but to institute a fair and permanent railroad wage level. The detailed facts upon which the wage policy of the Railroad Administration was based justify fully the conclusion of Director-General Hines as to the character of the wage advances. "The wages paid labor have been paid because they were regarded as reasonable and fair considering the cost of living, the competitive conditions of other labor, the recognized differentials between different sorts of railroad labor, and the desirability of a considerable measure of uniformity. . . . What has been done has been with reference to the reasonable requirements of the situation, and . . . it is highly unfair to railroad labor to attribute to the rates of wages which were thus arrived at and which are being paid, all the elements of abnormal cost which manifested themselves during the period of the war, and which must in part manifest themselves in a diminishing degree during this year of reconstruction." [14]

The average of the advances in rate per hour, allowed by the Railroad Administration through the complete "war cycle" of wage increases, as compared with the railroad wage level of 1913 and 1914, was slightly in excess of 100 per cent.; and the extent of this increase, since it is measured in rate per hour, was partly offset by the shortening of the working-day from ten to eight hours. This advance in railroad wages was not out of proportion to the increase in other permanent enterprises. In the iron and steel industry, for example, according to the reports of the Department of Labor, the increase in pay per hour during the same period was about 120 per cent.

[13] Senate Hearings, p. 18.
[14] *Ibid.*, pp. 904-905.

Moreover, the fact that an additional railroad wage increase, generally estimated to exceed $600,000,000, was found necessary soon after the resumption of private operation, establishes conclusively the reasonableness, as far as aggregate amount is concerned, of the wage advances under Federal Control. The railroad industry, because of the foundational character of the service which it renders, must, above all other industrial undertakings, be freed from the menace of disruption or disorganization. Statesmanlike arrangements for the peaceable settlement of labor disputes between the carriers and their employees are doubtless necessary and important; but first, as a minimum, and underlying all such arrangements, must come an honest endeavor to achieve a fair adjustment of wages and working conditions. The wage increases under Federal Control were but the concrete expression of such an effort.

In concluding our discussion of the important elements that affected the "cost" of moving traffic under Federal Control and influenced the financial showing of the Railroad Administration, we shall examine briefly, from the standpoint of finance, the extent and significance of the so-called "economies of operation" often referred to with pride and emphasis in the reports of the Administration, especially for the year 1918. When Federal Control was first considered, many of its staunch adherents contended that great financial advantage would accrue to the public through its adoption. One writer, an advocate of public ownership, asserts that "the losses to the public from wasteful competition and from political activities are colossal," [15] and this note runs through much of the comment on the railroad situation of 1917. It is not surprising, therefore, that Director-General McAdoo included "the application of sound economies" as one of the four primary purposes of the Railroad Administration. With this policy officially declared and the savings widely anticipated, the

[15] F. C. Howe, *Annals*, March, 1918, p. 164.

Administration resorted to many special means of achieving favorable results in this direction, and throughout the first year of Federal Control the Director-General was confident that these economies would prove extensive and significant. Mr. McAdoo's prophecy, as late as January 3, 1919, that a surplus of $100,000,000, with a consequent reduction in rates, might reasonably be expected for the year 1919, was largely based on this confidence.

Among the various policies adopted by the Railroad Administration involving the possibility of financial economy, some were primarily designed to augment carrying capacity. Short routing of freight, joint use of terminals, heavier loading of cars, fuller utilization of locomotives, and the like, were regarded, in the first instance, as means of increasing operating efficiency. There were many policies, however, the chief purpose of which was financial retrenchment. The administrative forces were so reorganized as to reduce the number of officials and the amount of their compensation. Competitive methods involving "unnecessary" costs were abandoned: advertising was curtailed; ticket offices were consolidated; "off-line" agencies for the solicitation of freight were abolished. Legal expenses were decreased through the elimination of men and the reduction of salaries. Purchases were unified through Regional Purchasing Committees. The standardization of equipment was intended to reduce costs as well as to hasten deliveries. Accounting methods were somewhat simplified, and the quotation and publication of rates, schedules, classifications, and time tables were unified as much as possible. The reduction of passenger service was doubtless intended to achieve both purposes—to increase essential carrying capacity, and to eliminate "unnecessary" expenditures.

These practices naturally resulted in financial savings, and the efforts of the Railroad Administration to achieve "sound economies" may, on the whole, be deemed praiseworthy. It is decidedly questionable, however, whether the extent and significance of these economies were such as to justify the great

importance attached to them in the reports of the Administration. While the estimated annual savings appear very substantial in the aggregate, a comparison of these sums with such items as the increase in operating expenses, or the increase in wages, renders the economies of management relatively unimportant in the final determination of the financial results of Federal Control. We may take, by way of illustration, the estimate presented to the Senate Committee by Director-General McAdoo for the year 1918. On the basis of reports received from five of the seven railroad regions, he estimated that savings totaling $85,576,424.71 had been realized during the twelve-month period between December 31, 1917, and December 31, 1918. The specific items by means of which these savings were effected included unification of terminals and stations, elimination of passenger service, reductions in organization, and miscellaneous economies.[16] Since the eighty-five million dollar figure covered but five regions, further additions would have to be made in order to include the entire country. A liberal estimate, however, would probably not increase the total savings for the year beyond $125,000,000. This is a very large sum, and if the desirability of the means of economy is granted, the Administration is entitled to full credit for the result. But these savings were relatively small as compared with the magnitude of the operating expenses of the railroads for the same period; they could exercise no de-

[16] In order that the relative importance of the various items through which savings were realized may be indicated, the following exhibit is set down from the Annual Report of the Regional Director for the Eastern Region for the year 1918 (p. 2):

Dec. 31, 1917, to Dec. 31, 1918.

Item	*Estimated Saving Per Annum*
a. Unification of terminals and stations	$ 4,172,000
b. Elimination of passenger service	12,190,000
c. Reductions in organization, as contrasted with the same under corporate control	3,677,000
d. Miscellaneous economies, the result of causes other than above	3,209,000
	$23,248,000

termining influence upon the financial outcome of Federal Control. The operating expenses for 1918 were in excess of four billion dollars; the total estimated savings constituted but little more than three per cent. of this amount. The *increase* in operating expenses for 1918, as compared with the preceding year, was more than nine times as great as these economies; and these financial economies constituted only about 13 per cent. of the annual *increase* in the wage bill of the railroads during the period of Federal Control. It might be added, furthermore, that the means adopted to realize these economies were not always accepted as desirable. There was much criticism of the general policy of attempting to obtain money savings, as distinct from savings in carrying capacity. The conviction was wide-spread, for example, that the financial benefits derived from such policies as the elimination of passenger trains and the abolition of "off-line" offices were far outweighed by the resulting impairment of the railroad service.[17]

§4. *The Financial Showing of the Administration*

Our discussion of costs and economies may now be followed by a brief statement of the actual financial results of Federal Control. That a large deficit was incurred by the Railroad Administration is well known. The extent of the deficit, according to the most authoritative figures now available, was $900,478,756, for the twenty-six months of government control.[18] Since the deficit for the year 1918 was only $236,184,040, almost three-fourths of the aggregate amount is creditable to post-war operation.

The explanation of these deficits, as has already been indicated, must be sought primarily in the rise of operating expenses—a rise entirely out of proportion to the advance in

[17] *Cf.* Senate Hearings, pp. 563-64; *Annals*, November, 1919, pp. 60-66.

[18] The following table, from the Hearing before the Sub-committee of the House Committee on Appropriations in charge of Deficiency Ap-

rates or the increase in operating revenues—coupled with the fixed obligation of the Government to pay the standard return to the carriers in the form of guaranteed rentals. During 1918 operating expenses increased by more than $1,738,000,000 over the annual average of the three-year test period; but the record traffic of 1918, in spite of the rate advances, produced an increase of less than $1,555,000,000 in gross revenue as compared with the test period. If the increase in rates had become operative from the beginning of 1918, it is estimated that $494,000,000 would have been added to the revenue of the railroads, and the 1918 deficit of upward of $236,000,000 would have been entirely eliminated. During the year 1919 the operating expenses were greater by more than $2,141,000,000 as compared with the annual average of the test period, while the gross revenues increased by less than $1,813,000,000.[19] This increase in operating expenses, even as compared with 1918, was due to the completion of the "war cycle" of wage advances and to the upward trend, after the armistice, of prices of materials and supplies. The failure of operating revenues to cover these increased outlays, in spite of the fact that the new rate level was effective throughout the year, was due, in

propriations for the fiscal year 1920 and prior fiscal years, Sixty-sixth Congress, Second Session, p. 84, sets forth the details of the deficit:

ESTIMATED EXCESS OF OPERATING EXPENSES AND RENTALS OVER OPERATING REVENUES

Class (1) railroads	$677,513,152
Other privately owned properties (smaller railroads, sleeping and refrigerator car lines and steamship lines)	43,011,129
Inland waterways	2,449,739
Expense of central and regional organizations	13,954,980
American Railway Express Co.	38,111,742
Other profit and loss debit balances:	
Adjustment for materials and supplies in settlement with railroad companies on account increasing prices	85,204,618
Net interest adjustments and miscellaneous income debits and credits	40,233,396
Total profit and loss debit balance	$900,478,756

[19] The following table (House Appropriations Committee Hearings,

large measure, to the abnormal traffic conditions which prevailed during the greater part of the year 1919. The extraordinary slump in freight business during the first six months of 1919 resulted in a deficit, for these months alone, of $292,500,000. Toward the end of the calendar year, during November and December, the great coal strike so disorganized industrial activity, and resulted in such operating difficulties and such a marked decrease in railroad traffic, that a deficit of $114,000,000 was incurred in this period. A large part of the

p. 202) presents a detailed comparative statement of operating revenues and expenses for the years 1918 and 1919, and for the test period:

REVENUES AND EXPENSES OF CLASS I ROADS AND LARGE TERMINAL COMPANIES DURING 1919, 1918, AND ANNUAL AVERAGE OF TEST PERIOD

(Interstate Commerce Commission Monthly Summary)

	Calendar Year		Annual Average of Test Period
	1919	1918	
Miles operated	233,992	234,305	230,493
Operating revenues:			
Freight revenue	$3,556,734,573	$3,458,190,626	$2,369,054,426
Passenger revenue	1,178,119,954	1,032,671,429	685,680,703
Other operating revenue	449,375,717	435,731,902	316,925,253
Total operating revenues	5,184,230,244	4,926,593,957	3,371,660,382
Operating expenses:			
Maintenance of way and structures	778,105,318	656,600,508	403,501,408
Maintenance of equipment	1,232,701,638	1,110,277,700	563,978,613
Traffic	47,537,552	48,740,756	61,430,681
Transportation	2,193,264,002	2,056,478,949	1,149,195,319
Miscellaneous operations	48,972,187	38,851,289	26,449,855
General	125,436,777	112,319,160	81,647,304
Transportation for investment—Cr.	6,028,724	6,060,861	7,270,872
Total operating expenses	4,419,988,750	4,017,209,501	2,278,932,308
Net operating revenue	764,241,494	909,384,456	1,092,728,074
Taxes	199,193,698	186,966,159	149,550,608
Uncollectible railway revenues	917,570	614,726	746,232
Railway operating income	564,130,226	721,803,571	942,431,234
Equipment and joint facility rent—Dr.	48,336,939	28,692,401	37,396,098
Net operating income	515,793,287	693,111,170	905,035,136
Operating ratio	85.26	81.54	67.60

deficit for both periods would doubtless have been avoided under normal traffic conditions.

It is to be remembered, moreover, that the estimated excess of expenses over revenues which produced the aggregate deficits covered the guaranteed rentals to the carriers as well as expenses of operation. The obligation to pay these rentals—totaling in excess of $900,000,000 annually—was a fixed obligation under Federal Control, liberal in extent and payable by the Government, regardless of conditions of traffic and the level of rates, and irrespective of the burden of wage increases or mounting commodity prices. It is true that the operating ratio—the percentage of gross revenue consumed in operating expenses—increased from 67.60 for the test period and 70.48 in 1917, to 81.54 in 1918 and 85.26 in 1919; but a very substantial residue of net income was none the less still available. In assessing the significance of the total deficit of more than $900,000,000 we must not lose sight of the fact that for the twenty-six months of government operation approximately two billions of dollars were made available for railroad bondholders and stockholders, or added to capital investment, through the guaranteed standard return. In other words, the actual net income, above operating expenses, was substantially in excess of one billion dollars for the period of Federal Control. It is to be noted, also, that for the months of January and February, 1920, the railroads were allowed a rental of about $150,000,000—the full two-twelfths of a year's rental, in accordance with the provisions of the contract agreements under the Federal Control Act—although a saving of some $49,000,000 might have been realized if the carriers had received a rental proportionate to the normal earning capacity of January and February as shown by the three-year test period.

The adverse judgment of the financial showing of the Railroad Administration that so widely prevails finds no justification in any impartial analysis of the essential facts. Aside from the increase in the cost of railroad materials and supplies,

the extent of which does not lend itself to accurate measurement and over which (aside from the influence of unified purchasing) those charged with the operation of the transportation system had no direct control, the policy of the Administration with regard to rates and wages was the determining factor in the financial outcome of the undertaking. The rate advances probably increased *revenues* by approximately one billion dollars annually. These rates, because of practical exigencies, could not become operative till after six months of Federal Control had elapsed. The increase in wages added approximately a billion dollars annually to *operating expenses.* Because of the extreme urgency of labor's demands, this increase, as promised, became effective from the beginning of Federal Control. Add to these facts the rapid increase in commodity prices and the abnormal character of traffic conditions during the greater part of 1919, and the financial deficit becomes inevitable. It is claimed, of course, that the Administration should have been able to forecast results and increase its revenues accordingly. We have already seen that the Director-General's choice of the deficit, with all its attendant criticism, in place of makeshift resort to further rate advances, was based upon sound considerations. The claim, on the other hand, that the increase in operating expenses was unwarranted must spring from the assumption either that the wage increases were exorbitant or that railroad revenues were unnecessarily consumed through inefficiency. The question of the justice of the Administration's wage policy has received previous consideration. The question of the relative efficiency of private operation and Federal Control will not be determined definitively until the lapse of time has rendered possible a more complete investigation and a more careful analysis of the operating results than is feasible at the present time. But such facts as have been disclosed, while they may not justify the large expectations of public ownership enthusiasts, certainly lend no support to the imputation of inefficiency on the part of the Railroad Administration.

More recent developments throw additional light on the situation. In the transition from Federal Control to private management it was found necessary to extend for a period of six months the government guaranty of the standard return; and the great majority of the roads deemed it to their advantage to avail themselves of this guaranty. If the unfavorable financial showing of the Administration had been due to inefficiency, the carriers might have found this public safeguard unnecessary. Moreover, the operating results of the first few months of private operation, since March, 1920, lend further confirmation to the contention that the deficit under Federal Control cannot justly be attributed to the inefficiency of public operation. The abnormally high operating ratio of 85.26 for the year 1919 rose to 91.57 for March and 100.72 for April of 1920. These operating ratios were substantially higher, also, than those of the first two months of 1920. The operating ratios for January and February, 1920—the last two months of Federal Control—were but 82.82 and 97.68, respectively. Moreover, in April, 1920—under private management—the operating expenses, exclusive of rentals or standard return, exceeded the gross revenue of the railroads. It is true that the "unauthorized" strikes of that month contributed to this extraordinary result; but there is little comfort in such figures for those who would explain the deficit under Federal Control by reference to operating inefficiency. Finally, the admitted necessity of the general increase in railroad rates—estimated to add about a billion and a half dollars annually to the revenue of the railroads—which became effective late in August of 1920, at the earnest solicitation of the carriers, is a clear indication that the unfavorable financial showing under Federal Control was due to the inadequacy of the rate level rather than to the unreasonable expansion of operating costs.

These considerations provide convincing evidence that the fact of the deficit neither proves that a "loss" was incurred by the Railroad Administration, nor establishes the conclusion that the cost to the public of conducting operations during

Federal Control was greater than it would have been under private management.[20]

§5. *Maintenance and Improvements*

No estimate of the results of Federal Control would be complete which failed to indicate the effect of public operation upon the condition of the railroad properties. All of the standard contracts with the individual railroad companies, in accordance with the requirements of the Federal Control Act, contain "adequate and appropriate provisions for the maintenance, repair, renewals, and depreciation of the property, for the creation of any reserves or reserve funds found necessary in connection therewith, and for such accounting and adjustments of charges and payments, both during and at the end of Federal control, as may be requisite in order that the property of each carrier may be returned to it in substantially as good repair and in substantially as complete equipment as it was in at the beginning of Federal control. . . ." [21] The extent to which these obligations have been fulfilled will be determined, if possible, by agreement, in each individual case, between the Government and the carrier; or, failing such agreement, through judicial decision after resort to litigation. Such facts concerning the general situation as are available, however, deserve examination at this point.

As a result of the rapidly changing value of the monetary unit, actual expenditures for maintenance of way and structures were abnormally high during the period of Federal Control. In 1918 these expenditures, for Class I roads, amounted to $656,600,508, and in 1919 they rose to $778,105,318. As

[20] Director General Hines, in his final report to the President, in March, 1920, analyzes the problem in measured, but convincing, terms. His defense of the financial results of Federal Control, in view of the many misconceptions and misrepresentations that are widely current, deserves the fullest publicity. See Report to the President for fourteen months ended March 1, 1920, pp. 23-24.

[21] Federal Control Act, Section 1.

compared with an average annual outlay of $403,501,408 during the three-year test period for this purpose, these figures show an average annual increase of approximately 78 per cent. during Federal Control (excluding January and February of 1920). But railroad officials frequently assert that these figures, because of higher costs of materials and supplies and the lower efficiency of labor, mean little; that from the physical standpoint the railroads were in fact undermaintained. In support of these assertions evidence is adduced to show that a smaller amount of materials—in rails, ties, and ballast—was utilized during the period of public control than in the corresponding period of private management. Some of the facts thus presented cannot be gainsaid. By way of reply, Director-General Hines insists that the shortage in rails, ties, and ballast "on some railroads" dates back to the pressure on labor and materials in 1918; that it was impracticable to make up this shortage in all cases during 1919; that there was overmaintenance of a compensating amount in other connections. His conclusion, then, voiced as early as June, 1919, and restated in his final report for the Railroad Administration, is this: "As to maintenance of way and structures it is believed that, on the general average, the Government has closely approximated compliance with its contract obligation to return the properties in substantially as good condition as when received."[22] This entire problem is a very difficult one. Decisive data are not yet available; but in general it may safely be said that the attitude of the Railroad Administration was not conspicuously liberal. There will doubtless be many valid claims for undermaintenance. Over this matter of maintenance of way and structures, as over the question of the destruction of corporate good-will through the processes of unification, long controversy between the carriers and the Government is likely to ensue.

The problem of maintenance of equipment next presents it-

[22] Report to the President for fourteen months ended March 1, 1920, p. 42.

self. Money expenditures for this purpose increased from an annual average of $563,978,613 for the three-year test period, to an annual average of $1,171,489,669 for the years 1918 and 1919, or approximately 93 per cent. Here, as in the case of maintenance of ways and structures, however, the physical facts are more important than their pecuniary representation. The problems at issue concern the condition of cars and locomotives at the termination of Federal Control, and the extent of renewals in the course of its duration. The claim of the Railroad Administration, which seems to be adequately substantiated by the facts, is that the condition of freight equipment (upon the resumption of private operation) "will compare favorably with the condition at the beginning of Federal control." On January 4, 1918, the number of bad-order cars was 5.2 per cent. of the total cars on the line. As of February 21, 1920,—toward the end of Federal Control—the number of bad-order cars (provided 14,275 cars "which are held out of service awaiting authority from the corporations to retire" are deducted from the total number) was 5.6 per cent. of the total cars on the line. On January 4, 1918, 18.5 per cent. of the locomotives (the reports covered but 49,204) were in shop or awaiting repair; as of February 7, 1920, 17.4 per cent. of a total of 65,081 locomotives were in shop or awaiting repair. Passenger equipment was declared to be in "good and safe condition," although on the average two years older than at the beginning of Federal Control, since very few new passenger-train cars were added during the period of public operation. It should be noted, however, that this record of satisfactory maintenance of railroad equipment was not consistently maintained throughout the Federal Control period. As a result of the car surplus of the early months of 1919, maintenance was largely neglected, and the pressure of the unauthorized strike among the shopmen in August contributed to the same result. On August 16, 1919, there were 228,549 bad-order freight cars, or 9.2 per cent. of the total number of cars. The condition of railroad equipment at the end of Fed-

eral Control, therefore, was much better than had been generally anticipated by the carriers. As to renewals, no dependable data are available. The records make no differentiation between new equipment acquired by way of actual additions to existing facilities, and new equipment secured in lieu of retirements. The great shortage of cars and locomotives, however, especially during the war activity of 1918, and the extreme difficulty of obtaining new facilities even at abnormally high prices, led the Railroad Administration to adopt the policy of postponing the retirement of equipment as long as possible. This circumstance doubtless rendered the condition of railroad equipment at the termination of Federal Control less satisfactory than would appear from a mere acceptance of the percentages of bad-order cars and locomotives in shop or awaiting repairs.[28]

Nor were the total deliveries of new equipment during the period of Federal Control, whether by way of replacements or as actual additions, adequate to meet the traffic burden of the railroads. During 1918 the Railroad Administration ordered 1,930 locomotives and 100,000 freight cars "of the types believed to be the most urgently needed for war purposes." These freight cars were limited, in the main, to box cars and open-top cars, and did not include any refrigerator cars, tank cars, stock cars, or flat cars. No passenger cars whatever were purchased by the Government. These orders for equipment were determined by an estimate of the amount of materials and supplies that could be obtained for the purpose. During 1919, because of the approaching termination of Federal Control and the Congressional policy of financial retrenchment, no new equipment was ordered. Aside from the original program of

[28] "The Railroad Administration has stated that of the 150,133 bad-order cars on the fifteenth of November (1919), 19,300 (this number was changed to 14,275 by the end of Federal Control) were held out of service as not worth repairing. This is certainly a minimum figure. The deferred retirements amount to at least 100,000 cars, and although some of the box cars may be worth reinforcing and returning to service, not less than 75,000 cars should be scrapped." *Railway Age*, Jan. 2, 1920, p. 31.

1918, therefore, additions to equipment during the Federal Control period resulted from direct purchases by the railroads themselves and from the construction of facilities in railroad shops. The total deliveries for the twenty-six months included 4,417 locomotives, 134,213 freight cars, and 807 passenger-train cars.[24] Except in the case of locomotives, this new equipment was less than the average annual additions during the decade ending in 1914, and very substantially less than that needed to meet the abnormal demands of the war period.

The preceding discussion of the policy of the Railroad Administration with regard to new equipment leads to a consideration of the more general problem of capital expenditures for railroad improvements. We have noted that one of the underlying reasons for the assumption of government control was the inability of the carriers to raise sufficient funds for the capital account, both because of impaired railroad credit, and the abnormal character of the money market. One of the objectives of Federal Control was to secure essential improvements in railroad plant and equipment through the instrumentality of public finance. The Federal Control Act placed the entire problem of improvements in the hands of the Government; the individual roads were permitted to raise their own capital only on approval of the Railroad Administration. Early in the life of the Administration, therefore, a Division of Capital Expenditures was organized. This Division requested the companies to submit budgets of expenditures

[24] The following table, from the report of Director-General Hines for the fourteen months ended March 1, 1920, (p. 32), presents the details of total deliveries of equipment during the period of Federal Control, including equipment purchased directly by the railroads or constructed in railroad shops:

	Purchased by Railroads	Constructed in Railroad Shops	Purchased by Railroad Administration	Total
Locomotives	1,910	393	*2,114	4,417
Freight cars	25,600	12,909	95,704	134,213
Passenger-train cars..	700	107		807

* Includes 200 Russian locomotives leased from the War Department.

chargeable to the capital account, and passed individually on all items submitted. Instructions were issued to the companies "to avoid the necessity for raising any new capital which is not absolutely necessary for the protection and development of the required transportation facilities to meet the present and prospective needs of the country's business under war conditions." [25] All other improvements were suspended, unless they had already progressed so far as to render their suspension impracticable.

The carriers' initial budgets, for 1918, called for a capital investment of $1,329,000,000. The actual authorizations, however, because of the conservative attitude of the Division of Capital Expenditures and the impracticability of carrying out some of the projects under war conditions, amounted to $906,178,538. The authorizations for the year 1919, both because of the uncertain status of Federal Control and the extensive "carry-overs" from the preceding year, were very much smaller, amounting in the aggregate to but $264,952,630. For the two years, therefore, capital expenditures of $1,171,131,168 were authorized. But the actual expenditures were very much less than this figure. The exigencies of war, in 1918, and the difficulty of obtaining appropriations, in 1919, delayed the completion of some of the improvements authorized and forced the abandonment of others. In neither year did the mere order of material or equipment insure delivery or completion. There was a large "carry-over," therefore, from 1918 to 1919, and the actual expenditures were $473,628,013 and $322,267,725 respectively, making a total for the two years of $805,895,738. Of this amount $509,376,913 was spent for additions and betterments (excluding equipment) of existing lines, $265,160,762 for equipment, and $31,358,063 for the construction of extensions, branches, and other new lines.[26]

These figures cover capital expenditures during 1918 and 1919 for which formal authorization was granted by the

[25] General Order No. 12.

[26] The following table, being an abstract of the detailed exhibit contained in the annual report of the Division of Capital Expenditures for

Division of Capital Expenditures; they do not disclose the total amount of capital investment in the railroad properties during the period of Federal Control. In the first place, work involving charges to the capital account not in excess of $25,000 (the amount was later reduced to $1,000) could, by authority of the Director-General, "be contracted for and commenced without approval" of the Railroad Administration. Expenditures incurred on this basis were not included in the report of results as thus far analyzed. Furthermore, these figures did not cover such capital investment as was made in the last two months of Federal Control—in January and February of 1920. Finally, they do not include the relatively large amount of capital expenditures financed by the roads themselves, with the authorization, but without the aid, of the Railroad Administration. These considerations explain the estimate submitted by Director-General Hines in his final report (March 1, 1920) that the sum-total of capital expenditures, including additions and betterments, equipment, and extensions, for the twenty-six months of Federal Control, was approximately $1,200,000,000. This sum was largely raised by Congressional appropriation, and loaned to the carriers under

1919 (pp. 13-14), will indicate the relationships of the various authorizations and expenditures for the years 1918 and 1919:

CAPITAL EXPENDITURES: FEDERAL CONTROL: 1918, 1919. CLASS I ROADS. (Three months estimated.)

Item Symbol	Estimated Cost of Work Authorized			Expenditures for Work Actually Done		
	1918	1919	Total	1918	1919	Total
A.	$567,327.140	$215,946,749	$783,273,889	$272,222,972	$237,143,941	$509,376,913
B.	289,247,838	41,179,618	330,427,456	180,058,810	85,101,952	265,160,762
C.	49,603,560	7,826,263	57,429,823	21,346,231	10,011,832	31,358,063
D.	$906,178,538	$264,952,630	$1,171,131,168	$473,628,013	$332,267,725	$805,895,738

Explanation: Item A—Additions and Betterments.
Item B—Total equipment (including improvements).
Item C—Extensions, Branches, New Lines.
Item D—Total—All expenditures.

NOTE: This table does not include the last two months of Federal Control, nor the capital investments financed without Government aid by the private companies.

the provisions of the Federal Control Act. About $900,000,000 of the total capital expenditures were thus provided. In addition, the railroad companies raised about $140,000,000 through their own efforts, and reinvested their earnings, through deductions from the governmental compensation, to the extent of about $180,000,000. The total indebtedness to the Government of the railroads and other properties under Federal Control on account of capital expenditures was reported, as of March 1, 1920, as $938,615,551.[27]

The aggregate amount of investment during the period of Federal Control for improvement of the railroad properties, though scarcely adequate to absorb past deficiencies and to provide for the increased traffic burden, may be regarded, in view of the credit difficulties of the war years, as a reasonably extensive addition to railroad capital. It is decidedly questionable whether such results could have been attained under private management. The average annual investment was well over half a billion dollars. In 1917, under private management, approximately $730,000,000 was added to the capital account of the railroads; but this was the result of heavy reinvestment of earnings, which had exceeded a billion dollars for the year. The roads were able to raise only about $130,000,000 in 1917 through the marketing of new securities. Dur-

[27] The following table, from the final report of Director-General Hines (p. 33), presents in summary form the extent and purposes of capital expenditures during Federal Control:

	Calendar Year		Total, 2 Years
	1918	1919	
Roadway and track	$294,000,000	$247,000,000	$541,000,000
Improvements to existing equipment	19,000,000	21,000,000	40,000,000
New equipment purchased by railroads	161,000,000	64,000,000	225,000,000
New equipment purchased by Railroad Administration	118,000,000	239,000,000	357,000,000
Total	$592,000,000	$571,000,000	$1,163,000,000
Estimated expenditures in January and February, 1920			37,000,000
Total for period of Federal control			$1,200,000,000

ing the year ending June 30, 1916, the railroad capital account showed an increase of only $248,000,000. And the average annual capital investment for the entire decade ending December 31, 1917—immediately preceding Federal Control—was no greater than the average capital additions made during the period of public operation.

This showing, in some respects, appears to be purely negative; while there was no falling off in capital expenditures, there was no substantial increase as compared with the pre-war period. There was, without doubt, wide expectation that the unification of financial operations under Federal Control, with the support of governmental credit, would make possible a decided advance in the physical and financial rehabilitation of the railroads. This expectation was not realized for a number of reasons. During 1918 the actual shortage of labor and materials rendered impossible any ambitious program of railroad improvement. In addition, the Railroad Administration conceived its functions to be concerned primarily, if not exclusively, with provision for the war necessity. It accepted frankly the explicit declaration of the Federal Control Act that the system of public railroad operation was an emergency measure. This was evidenced by the original instructions of the Division of Capital Expenditures, already referred to. And this attitude was accentuated after the armistice. As early as December 10, 1918, because "it was no longer necessary to anticipate the needs of the carriers for purely war purposes," the Director of the Division of Capital Expenditures wrote as follows to the Regional Directors: "As to entirely new work not yet authorized we are proceeding upon the view that it is not expedient to grant authority therefor unless either (a) there is imperative necessity for the improvement, or (b) the corporation itself desires the improvement, and is willing to finance it. The question arises as to whether the same considerations ought not to operate to cause the cancelation or postponement of any authorities already granted in cases where the work has not been started, or if started is in such shape

that it could be suspended without loss."[28] In face of these views, it is not surprising to find that the largest authorizations for additions and betterments, aside from equipment, were for yard tracks, sidings, and industrial tracks, and for shop building, engine houses, and appurtenances. The dominant purpose was to secure such intensive development of plant and equipment as would meet the exigencies of immediate necessity. This purpose accounts, in great measure, for the curtailment of expenditures even during 1919, after the demand of the war industries for labor and materials had largely abated.

But part of the responsibility for the restricted character of the improvement program of the Railroad Administration must be placed upon our unwieldy system of governmental finance. The Administration was seriously hampered by lack of sufficient and timely appropriations. The initial revolving fund of $500,000,000 was inadequate, and its inadequacy was intensified by the unfavorable financial results of 1918. A large part of this fund, which was intended primarily as capital, was absorbed in liquidation of the Government's indebtedness by way of compensation. In 1919 the situation was aggravated by the adjournment of Congress without passing the deficiency appropriation for the Railroad Administration. The improvement program, and even expenditures for maintenance, were perforce reduced to a minimum. And when Congress reconvened, the Director-General's relatively conservative budget of $1,200,000,000 was cut to $750,000,000. Both Congress and the President were apparently eager to return the roads to private management with the least possible delay. Under these circumstances it was not the function of the Railroad Administration to formulate an extensive program of railroad improvement, nor was it within its power to do so. The success of its efforts must be judged, in the main, with reference to war needs. From this standpoint, in view of the physical limitations upon productive capacity during the year 1918 and the financial difficulties encountered during the following year,

[28] Annual Report of Division of Capital Expenditures for 1919, p. 9.

the improvement program of the Railroad Administration may reasonably be declared to have been sufficiently extensive, and wisely directed.

§6. *The Labor Policy of the Administration*

We have now considered, successively, the record of the Railroad Administration with respect to the movement of traffic, the cost of the service and the financial results of the government effort, and the effect of twenty-six months of public operation upon the condition and extent of railroad plant and equipment. One task remains. The question of railroad labor constitutes an integral, and very significant, element in the railroad problem. In the course of the war, as never before, the establishment of equitable relationships between the railroad managements and the vast army of railroad workers was a task of prime importance. The success with which the Railroad Administration performed this task cannot (as in the case of traffic, efficiency, rates, wages, economies, deficits, maintenance, and improvements) be reduced to statistical measurement; but the labor policies and activities of the Government are an essential part of the record and must receive consideration.

Federal railroad control was ushered in with the memory of the discontent and the power of labor, as they had manifested themselves in the difficult days preceding the adoption of the Adamson Act in the fall of 1916, still fresh in the minds of every one. Moreover, in the winter of 1917, when public operation became necessary, large wage demands were being vigorously pressed upon the carriers. The inability of the roads to meet these demands, under the existing rate level, and the problematic character of the impending consequences, because of the real hardships suffered by railroad labor under the burden of war prices, served as one of the effective causes of Federal Control. The formulation of a labor policy, there-

fore, was one of the first of the urgent tasks which confronted the Railroad Administration.

The question of wages was of the greatest immediate importance. The details of the Administration's wage policy have been set forth in earlier pages; a brief historical survey of the various developments will serve our present purpose. As soon as the Government took possession of the railroad properties, the Director-General announced that the problem of adjusting the compensation of railway employees would receive immediate attention, and that such wage increases as might be deemed necessary would be made retroactive to the beginning of the year 1918. On January 18, the Railroad Wage Commission, with Secretary Franklin K. Lane as Chairman, was authorized to investigate the wage situation and submit recommendations. On the basis of its report, presented at the end of April, the first wage order of the Administration was issued on May 25. This order also created the Board of Railroad Wages and Working Conditions, to serve as an agency for adjusting the various complicated wage questions not adequately disposed of in the report of the Lane Commission or met satisfactorily by the Administration's initial wage increases. As a result of the recommendations of this Board, various supplements to the original order were issued, so that early in 1919 the "war cycle" of wage increases had been completed.

But the demands of railroad labor had not been fully satisfied. It was felt, among all classes of employees, that the advances were not proportionate to the increase in the cost of living and that railroad wages were still unduly low as compared with the wage level prevailing in other industries. Railroad walk-outs were threatening, and in August came the unauthorized strikes among the shopmen and engine-house men, embracing about 200,000 employees. The Government refused to consider the demands of the strikers until they had returned to their places, and then only minor adjustments were made, to eliminate inequalities of treatment. The major problem of further wage increases was referred to the President, and he,

"being advised that the demands were general in character and that similar demands were pending for practically all classes of railroad employees, and that all the demands contemplated permanent increases in wages, took the position that such demands ought not to be granted pending an opportunity to form a more reliable conclusion as to whether the then level of the cost of living could be regarded as reasonably permanent." [29] There was no noticeable decline in commodity prices during the months following the President's postponement of the wage demands, and a spirit of demoralizing discontent spread through the ranks of railroad labor. And when, toward the end of Federal Control, the employees again made earnest representations that their demands be given immediate consideration, the President felt compelled to deny their request on account of the impending termination of government control. Upon the return of the roads, therefore, large wage demands were outstanding, as they had been at the time of the assumption of Federal Control. It may be added, moreover, that although the President had promised that he would expedite a consideration of these claims upon the resumption of private operation, no decision was rendered by the Railroad Labor Board, created for this purpose by the Esch-Cummins Act, until late in July, 1920, when the unrest among the employees had become so wide-spread and unmanageable as to threaten complete disruption of the railroad service.

This wage policy has been subject to diverse and conflicting interpretations. In some quarters it has been regarded as unduly liberal, and as involving unnecessary and unwise concessions to the mere power of organized labor. This view, it is believed, fails to recognize the inherent justice of the demands of the railroad employees. Railroad labor was unquestionably underpaid at the beginning of Federal Control; the findings of the Lane Commission, based on a large mass of first-hand information, must be accepted as conclusive. The

[29] Report to the President for fourteen months ended March 1, 1920, p. 18.

shrinking purchasing power of the dollar during the twenty-six months of public operation rendered the old level of compensation impossible of continuance. Wage increases were inevitable—in the conduct of railroad transportation as in all industrial enterprise. The advances actually made seem large in amount, chiefly because they were secured through the official authorization of a single agency, and because they are measured in the aggregate for the entire railroad industry. The critics of the wage policy of the Railroad Administration seldom charge that the wages of particular railroad employees, or classes of employees, were excessive at the termination of Federal Control. And the prevailing impression that the wage increases were mainly the result of the sheer power of organized labor arises from the influence of the rather dramatic methods employed by the great railroad brotherhoods and the wide publicity which is always accorded to their efforts and activities. There is very little reason to believe that the increases would have been less extensive under private operation; the fact that substantial additional advances were granted after the resumption of private management, in spite of the emergence, by July, 1920, of a downward trend in commodity prices, destroys completely the claim of undue liberality in wage policy under Federal Control.

But criticism of the wage policy of the Railroad Administration has often taken the opposite direction. It has been urged very earnestly that the wage increases were not sufficiently extensive, and that the temporizing policy of the Government during the year 1919 was destructive of the morale of railroad labor and led to a loss of confidence in the sincerity and good-will of those charged with the administration of the railroads. The attitude of the Railroad Administration after the "war cycle" of wage increases had been completed was doubtless subject to such construction. The repeated postponements of the wage demands did in fact create a dangerous cleavage between the leaders of railroad labor and the rank and file of railroad employees. Intermittent resort to unau-

thorized strikes was the outward manifestation of this cleavage. It may be said, however, on behalf of the Government, that this attitude was largely determined by the exigencies of a difficult situation rather than by want of sympathy with the demands of the railroad employees. Under the provisions of the Federal Control Act the President and his duly appointed agents were explicitly directed to administer the railroad properties for the purpose of meeting the national emergency arising out of war conditions. The task of instituting permanent adjustments, whether as to rates or wages, was beyond the scope of the authority vested in them. Congress, with the sanction of the executive, and not the President or the Railroad Administration alone, could properly formulate the future railroad policy of the Federal Government. The establishment, by executive authority, of a new range level, to be permanently binding upon the carriers after the restoration of private management, would have substantially molded future railroad policy. The subsequent level of railroad rates, for one thing, was directly dependent upon the extent of the wage increases. When, therefore, early in 1919, the Congressional hearings relative to the extension of Federal Control disclosed an overwhelming national sentiment in favor of the immediate restoration of private management, the Government had little choice but to maintain the *status quo* until necessary legislation could be formulated. It is creditable to the Government that it withstood the temptation of gaining the favor and support of two million railroad employees—a distinct and significant advantage in the political combat that was soon to follow—at the expense of subverting the established processes for the expression of the national will. The wage policy of the Railroad Administration, while grounded in a sympathetic recognition of the just demands of railroad labor, was not unmindful of the rights of the carriers and the interests of the public.

But the labor policy of the Administration did not concern itself exclusively with wages. Elaborate machinery was set

up for the orderly consideration of all phases of labor relationships. At the very beginning of Federal Control a Division of Labor was established. The President of the Brotherhood of Locomotive Firemen and Enginemen was appointed Director of this Division, exercising authority coördinate with that of the directors of the other divisions created by the Railroad Administration. He received the complaints of the men in the first instance, and settled such complaints as were submitted by unorganized groups. Under the jurisdiction of the Division of Labor a large field force was organized for the investigation of working conditions. Because of the great increase in the number of women workers on the railroads resulting from the shortage of man-power (the number increased from 31,400 on January 1, 1918, to 101,785 on October 1, 1918, and still aggregated 81,803 on October 1, 1919), a Women's Service Section was created, for the investigation and improvement of working conditions especially applicable to women employees. It may be noted also, in this connection, that the wages of women, when engaged in the same class of work as men, were adjusted on the same basis as those of men. In addition to the Railroad Wage Commission and the Board of Railroad Wages and Working Conditions already referred to, three Boards of Adjustment were organized, to consider and settle such grievances of the railroad employees as could not be adjusted by local representatives of the carriers and representatives of the railroad workers. And the Director-General himself exercised a considerable measure of direct authority in the concrete development of the Administration's labor policy. Through the promulgation of general orders, regulations were established and standards of working conditions were defined, to supersede, in some cases, those that had prevailed prior to Federal Control, and to constitute, in the numerous cases where no such regulations and standards had existed, the basis for determining reasonable conditions of employment. The Director-General also reserved to himself power to interpret the wage orders, retained final jurisdiction in cases investigated by the

Board of Railroad Wages and Working Conditions, and exercised ultimate judgment in appeals from decisions of the Adjustment Boards.

By means of these agencies, the Railroad Administration sought "to secure the participation of the representatives of labor in matters affecting its interests, and to endeavor to act with justice toward labor and with appreciation of the perfectly natural and proper point of view of labor." [80] The various boards thus created were all bi-partizan bodies. Both the Board of Railroad Wages and Working Conditions and the three Adjustment Boards were composed of an equal number of representatives of the management and of the men. In the creation of the Boards of Adjustment the principle of collective bargaining was frankly recognized; these boards were the result of agreement between representatives of organized labor and the regional directors of the Railroad Administration. In like manner, the national agreements entered into between the Director-General and certain organizations of the railroad employees, defining working conditions and providing against strikes without prior resort to the established machinery of adjustment, served as a clear manifestation of the acceptance by the Government of the principle of collective bargaining. But no discrimination was shown against the unaffiliated employees. The policy enunciated early in 1918 that "no discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations" [81] was scrupulously and consistently executed throughout the life of the Railroad Administration. Such employees as were not members of the labor organizations were not deprived of the right to be represented by the officers of these organizations in the presentation of grievances before the Boards of Adjustment. Coupled with the recognition of the principle of labor representation in matters affecting the interests of the em-

[80] Report to the President for fourteen months ended March 1, 1920, p. 14.
[81] General Order No. 8.

ployees, the acceptance of collective bargaining, and the maintenance of the "open shop," was the establishment of the eight-hour day as a general policy of the Railroad Administration. In so far as the technical exigencies of operation and the pressure of war necessity would permit, the eight-hour day was made effective. It is this fact that accounts for the increase in the number of employees during Federal Control, and is the basis of the charge that the number of "jobs" was multiplied and the railroad pay-roll overloaded. There is no evidence in support of the claim that the railroad staff was increased because of political considerations. Railroad employees were selected, for the most part, by local officers of the carriers who had exercised this function prior to Federal Control, and the authority and influence of the Railroad Administration were directed toward the prevention of unnecessary employment. Hence the total number of hours of work paid for, because of the general prevalence of the eight-hour day, was smaller in 1919 than it had been in 1916, 1917, or 1918, in spite of the increase in the number of employees; and the number of hours of work paid for, in 1918 as well as in 1919, was smaller in proportion to the traffic burden than in either of the two years preceding Federal Control.[82]

As a result of these policies, the relationship between the railroad managements and the railroad employees during the period of Federal Control was much more satisfactory than it had been in recent years. Railroad labor received reasonable protection against arbitrary adjustments in working conditions and irritating practices in matters of discipline, and in return evinced a very gratifying measure of loyalty and coöperation. The orderly and prompt settlement of grievances submitted to the various Boards of Adjustment was but a concrete manifestation of the coöperative spirit that prevailed. In only a negligible number of the several thousand cases that fell within the jurisdiction of these bodies did the representatives of the

[82] The following table, from the final report of Director-General Hines (p. 21), presents in detail the outstanding facts with regard to the

carriers and the representatives of the employees fail to reach agreement; and on some of the largest and strongest roads all grievances were removed and all disputes were settled through direct negotiation between the management and the men, without the necessity of submitting a single case to the various Boards of Adjustment. Hence, too, there were no authorized strikes among railroad workers during the entire period of Federal Control. The unauthorized strikes were due in part to the irritation resulting from the repeated postponement of wage demands, and in some measure to the newness of the machinery established by the Railroad Administration for the settlement of labor disputes. On the whole, the labor policy

number of employees and the number of hours of work actually paid for during 1918 and 1919, as compared with the situation in the two preceding years:

	Calendar Years			
	1916	1917	1918	1919, Partly Estimated
Number of employees	1,647,097	1,723,734	1,820,660	1,891,607
Equated hours worked	5,189,790,716	5,406,878,384	5,641,820,405	5,126,142,664
Revenue ton-miles	362,444,397,129	392,547,347,886	403,070,816,694	363,240,000,000
Passenger miles	34,585,952,026	39,361,369,062	42,498,248,256	46,200,000,000
PER CENT. OF YEAR 1916				
Equated hours worked—per cent.	100	104.2	108.7	98.8
Revenue ton-miles — per cent.	100	108.3	111.2	100.2
Passenger miles —per cent...	100	113.8	122.9	133.6
Average hours per employee per month ..	263	261	258	226

NOTE: The time worked for about 11 per cent. of the employees is reported on a daily basis and in order to equate these days to hours, it has been estimated that these employees have worked on the average 10 hours per day for each of the years covered by the table. As a matter of fact the hours per day of some of these employees reported on a daily basis were less in 1919 than in previous years on account of the establishment of the 8-hour day, but in the absence of accurate statistics, all have been assumed to work 10 hours per day in 1919 as well as in the previous years, thus making the showing slightly less favorable to 1919 than it would be if the exact hours worked by daily employees were available.

of the Railroad Administration was an important factor in enabling the Government to meet adequately the war emergency of 1918, and to steer the transportation system safely through the many months of unrest and agitation that followed the armistice, and it constitutes, as will appear later, a positive contribution toward the elements essential for permanent adjustment of the railroad labor problem.

Federal railroad control, then, accomplished very creditably the purposes for which it was instituted. In the face of unprecedented difficulties, essential traffic, whether purely military or industrial, was moved successfully and expeditiously, with a scrupulous and intelligent regard for national ends; restrictions upon less urgent movement and communication were no greater than the exigencies of the situation demanded; the cost at which this traffic was moved, in spite of the alleged extravagance of the wage increases and the magnitude of the financial deficits, was decidedly reasonable; there was no flagrant neglect of railroad plant and equipment, and a measurable program of improvements was formulated and executed; and for the first time the interests of labor in the conduct of railroad transportation were accorded due recognition, resulting in greater justice for the railroad employees and greater stability for the transportation service. Aside from the accomplishment of war purposes, the advantages and disadvantages of Federal Control were indirect and incidental. Their influence upon the permanent solution of the railroad problem will be considered in subsequent chapters, in connection with the essentials of reconstructive policy and the elements of the railroad adjustment that followed the termination of Federal Control.





PART II

THE ESSENTIALS OF RECONSTRUCTIVE POLICY



CHAPTER VI

THE QUESTION OF RAILROAD NATIONALIZATION

The signing of the armistice, less than a year after the assumption of federal railroad control, foreshadowed the speedy termination of the war emergency and directed attention to the formulation of permanent railroad policy. On December 11, 1918—one month after the cessation of hostilities—Director-General McAdoo submitted his proposal for the extension of Federal Control, and early in January formal hearings were instituted by the Senate Committee on Interstate Commerce for the consideration of plans for the solution of the railroad problem. Although it soon became apparent, as the hearings progressed and public opinion began to be articulated, that the resumption of private management, with the least possible delay, constituted the most clearly-defined mandate of the people, the alternative of permanent nationalization of the railroads could not be eliminated without at least a formal consideration of its advantages and disadvantages. The dramatic circumstances of the war aroused a deep-rooted and wide-spread demand for the adoption of a constructive railroad policy in place of the makeshift changes that had marked the historical development of railroad regulation. Since our traditional system of private management under governmental supervision had failed to produce an adequate transportation service and a satisfactory adjustment between the rights of the carriers and the interests of the public, the substitution of public ownership and operation naturally suggested itself as the most thorough-going expedient of reconstructive policy. Moreover, the fact that the railroads were being op-

erated by the Government when the question of their future status presented itself for settlement necessarily raised the problem of the significance of the war experience in the enactment of permanent railroad legislation. And the further fact that the railroad brotherhoods and organized labor as a whole vigorously opposed the resumption of private management, made public ownership and operation a possible solution of immediate practical importance, instead of permitting it to remain a matter of remote academic interest. In our analysis of the essentials of reconstructive policy, therefore, we shall first consider the question of railroad nationalization.

§1. *The Purposes of Nationalization*

It is necessary at the outset to ascertain the essential purposes which a policy of nationalization aims to achieve; and a brief preliminary consideration of the leading types of public railroad control will help to clarify the meaning of nationalization and the character of its purposes.

First, there was the possibility of continuing the method of the war administration of the railroads—private ownership and unified operation by the Government. This type of control had been expressly resorted to as an emergency measure and found few advocates as a permanent policy. The proposal of the Railroad Administration for a five-year extension of Federal Control was advanced as a transitional and not as a permanent method of settlement. The burdens of ownership can admittedly be carried more successfully by the Government than by private capital; the opposition to nationalization springs primarily from the fear of wasteful and inefficient governmental operation. No special advantage could accrue, therefore, from private ownership and public operation. Such a policy would constitute but a half-way measure toward nationalization. If the principle of direct public administration were once accepted, the assumption of government ownership and its incidents would naturally follow. The present

owners of the roads would receive compensation in the form of interest on government bonds in place of a guaranteed return on their own securities. Moreover, it is questionable whether the adjustment relied upon during the war emergency could be legally continued for an indefinite period, in view of the constitutional safeguards against confiscation, without the consent of the roads. The standard return under Federal Control was but the acceptance of the rental value of the railroad properties as the contractual measure of damages involved in government management; if public operation were to continue for an indefinite period of time, the measure of damages would probably be held to be equal to the purchase price of the roads. Under such conditions this policy would be tantamount to public ownership and operation.

A second alternative—the converse of the first policy—was the possible resort to public ownership and private operation. This policy has frequently been followed in foreign countries, where governments have built or acquired transportation systems and have subsequently found the tasks of actual operation unsuited to public management. The experience of Italy, Belgium, and Holland illustrates the circumstances which have led to the adoption of this type of public railroad control.[1] This policy of public ownership and private operation need receive no elaborate consideration, because it does not present a solution that grows out of the essential characteristics of the American railroad situation, and because it is not calculated to eliminate the acknowledged defects of our transportation system. With the roads privately owned, with the purchase value of the railroad properties generally estimated to approach twenty billions of dollars, and with the chief purpose of public control directed to the creation of a national transportation system, the mere acquisition of railroad ownership by the Government would involve the assumption of a great financial burden without necessarily removing the essential

[1] *Cf.* W. M. Acworth, *Historical Sketch of Government Ownership of Railroads in Foreign Countries*, pp. 3, 14, 18, 62.

drawbacks of competitive private management. The proposal of a single operating company, suggested in the Plumb Plan espoused by the railroad brotherhoods, corresponds nominally to this policy of public ownership and private operation. But the details of the plan, which will be subjected to fuller analysis in subsequent pages, indicate but a formal correspondence between these two policies. For all practical purposes the Plumb Plan, because of the dominant control of the public authorities and the effective elimination of the stimulus of private profit, would involve in its essence the acceptance of a special form of direct operation by the Government; and hence is not genuinely representative of the particular type of public control now under consideration. In European experience the prevalent practice has been to lease the roads to two or more competing companies organized for profit, and reliance has been placed upon the force of competition, in large measure, to safeguard the public interest. Because of the vastness and complexity of our railway net, and because of the widely-recognized evils that spring from railroad competition, such an arrangement is manifestly unsuited to American conditions. It is an adjustment acceptable neither to the advocates of public ownership nor to the supporters of private management. Public ownership and private operation has not been seriously urged in this country as a solution of the railroad problem.

There remained, therefore, either the restoration of private management, under a reconstructed system of government regulation, or the complete nationalization of the railroads, through the adoption of public ownership and operation. We are concerned, at this juncture, with the relative merits of these two *types* of public control; the specific details of particular plans and measures will receive consideration elsewhere. And the basic fact concerning railroad nationalization as it is commonly advocated—through the recognition of which fact both its advantages and its disadvantages can be the more intelligently and the more truly assessed—is that it

is directed to the achievement of the same purposes as the policy of railroad regulation.

Nationalization has frequently been regarded as a philosophic doctrine or a political ideal. Government ownership of railroads has been looked upon as an important step toward the realization of a general program of collective economic enterprise, and hence as desirable or undesirable *per se*. Such a conception of public ownership reflects a confusion of ideas; it fails to recognize the difference between the goal to be reached and the machinery for its attainment. The end of all economic activity is to supply human wants. In order that these wants may be satisfied as fully, as freely, and as justly as possible, in view of the organic nature of society and the complexities of modern life, a variety of methods of social control have emerged in practice and have been sanctioned or created by law for the promotion of the public interest under varying circumstances and conditions. Private competition, public regulation, and collective enterprise are all instrumentalities of social control over industrial action. The desirability and effectiveness of each of these policies must be judged by the results which it tends to achieve. Every agency which stimulates productive efficiency and makes possible an equitable distribution of economic output is a desirable and effective instrumentality. The primary justification for the continuance of existing economic institutions must be based on the assumption that they function satisfactorily from these standpoints; and proposals for change or reform should receive public approval only if they are calculated to render production more efficient and distribution more equitable. In the railroad industry, the experience of almost a century has established the futility of competition as an agency of social control. It is not only incapable, in the long run, of providing adequate service at reasonable charges, but it leads to rate fluctuations and discriminatory practices that are no less harmful than the normal results of the exercise of un-

restricted monopoly power. Public recognition of the peculiar nature of railroad competition and of the monopolistic character of the railroad industry led to the policy of regulation. Because the system of regulation failed to harmonize constructively the rights of the carriers and the interests of the public, the alternative of nationalization came to be advocated as an instrument of social control. The objective in all these cases is the same. The choice between reconstructing the policy of regulation or instituting railroad nationalization must be determined by practical considerations. It is a question of adjusting the means to the end. And it becomes evident, therefore, that public ownership and operation is not an ideal but an idea, not a philosophy but an expedient, not a goal in itself but an instrument for its achievement.

Under public ownership and operation, as under the established system of private management and government regulation, the transportation service would be rendered for a price —on a *quid pro quo* basis. It is not the purpose of nationalization to provide facilities for the movement of persons and the carriage of goods freely, the cost of the service to be covered through general taxation. Transportation is not conceived as a function of the state similar in character to its duty to afford protection to persons and property, or its obligation to furnish educational opportunities for its citizens, the burden to be borne by the community as a whole. The demand for nationalization is not motivated by such a desire, and the specific proposals for nationalization do not contemplate such an adjustment. It is merely intended, under public ownership, that the cost of the service, to the nation and to the individual, shall be reduced to the lowest possible level, and that the rate structure, as between different persons, industries, and localities, shall be so adjusted as to serve, primarily, public rather than private ends. The socialization of rates rather than the elimination of specific charges for specific services is the objective. It may well be that this purpose can be more adequately achieved through a nationalized railroad system than

under private management organized for profit. But regulation, no less than nationalization, aims to accomplish this end. The acceptance of one or the other of these policies involves a choice between two expedients rather than a decision between two ideals.

Nor, on the other hand, does nationalization of the railroads seek to establish a state enterprise for public profit. Its advocates have no desire to transform the business of railroad transportation into a fiscal monopoly. The effect of nationalization upon public finance would be indirect and incidental: it would manifest itself, in the first instance, through an increase of the national debt as a result of the purchase of the roads, and subsequently through a decrease in public revenue as a result of the reduction of taxable property. No major political end is to be served by public ownership. The demand for railroad nationalization is not grounded in the need of increasing public income or changing the sources of governmental revenue; nor has it arisen, as has frequently been the case in foreign experience, because of the desire to secure military advantage, or to prevent industrial domination by foreign capital, or to unify newly federated or disintegrating states.

The primary and dominant purpose of public ownership, as of government regulation, is to produce the best and cheapest possible transportation service, rendered in the interest of the larger social welfare. The desirability of nationalization must depend upon whether it would tend to improve the service, lower costs, produce greater efficiency, stimulate more progressive management, lead to a more equitable adjustment of conflicting interests, make possible a more desirable development of the character and direction of economic activity—in short, whether it would result in a better transportation system than is possible under private ownership and administration, even when reinforced by a constructive policy of government regulation.

§2. *The Advantages and Disadvantages of Nationalization*

If comparative data, not vitiated by essential differences in the conditions they are designed to reflect, were available, the statistical method would provide the most convincing evidence of the relative advantages and disadvantages of public and private operation. For this purpose, in the absence of American experience with both systems, the results of foreign experience are often exhibited by both the advocates and the opponents of nationalization. Freight rates and passenger charges are analyzed and compared, the relative extent and quality of the service are tested by standards of efficiency and figures of performance, and the financial results of the privately-owned systems of transportation and of the state railways are "pointed to with pride," or "viewed with alarm." It is significant that the same countries are frequently cited as evidence of both the "success" and the "failure" of public ownership.[2] In some measure the difficulty arises from the fact that the figures themselves are not strictly comparable. In the latest available compilation of comparative railway statistics for the United States and foreign countries the student is expressly cautioned that "It would be an impossible task so to tabulate and adjust the railway statistics of a number of countries—differing from each other in so many respects—as to place them on a strictly comparable basis. Every attempt to present a comparison between statistics of different countries encounters practically insuperable obstacles. These spring from differences in classification of data, in the composition of accounts, and in the organization and character of railway service."[3] But much more fundamental than these technical obstacles are the difficulties of interpretation. There

[2] *Cf.* S. O. Dunn, *Government Ownership of Railways;* W. M. Acworth, *op. cit.;* and statement of Albert M. Todd, President of Public Ownership League of America, in Senate Hearings, pp. 1326-1367.

[3] *Comparative Railway Statistics, United States and Foreign Countries,* 1916: Bureau of Railway Economics, Bulletin Consecutive No. 170, 1920.

is such great diversity in the extent and character of the various railroad systems, as well as in the social, economic, and political conditions which constitute the environment in which they function, that it is entirely unsafe to assume that the results in one country, however favorable, can necessarily be duplicated in another, or that failure will inevitably attend every project of railroad nationalization because of its unfavorable outcome under particular circumstances and conditions.

The vitiating influences are especially numerous and strong when the experience of foreign state railways is presented in support of or in opposition to the nationalization of the American railroad net. In 1916 (the latest date for which complete comparative statistics are available) there were almost 260,000 miles of line in the United States. This mileage was considerably in excess of the railway mileage of all the countries of Europe combined, constituted more than 40 per cent. of the total railway mileage (639,000) of the thirty leading countries (having about seven-eighths of the total railway mileage of the world) for which statistics are included, and was greater by about 30,000 miles than the aggregate publicly-owned mileage of the twenty-seven of these thirty countries having state railway systems.[4] It is apparent that the mere magnitude of the problem of nationalization, both by way of initial financing and subsequent administration, is incomparably greater in the United States than in any foreign state.

But there are also fundamental operating differences that must exert a direct influence upon rates, service, and financial results. In comparing American railroad conditions with those of European countries having national railway systems, it is to be noted, for example, that while the number of miles of line operated per 100 square miles of area was 8.73 in the United States, it was 10.52 in Italy, 23.12 in Switzerland, 26.

[4] The state railway mileage of the European countries was as follows: Austria (in 1913), 11,987; Belgium (in 1913), 2,721; Bulgaria (in 1914), 2,930; Denmark (in 1915), 1,205; France (in 1913), 5,642; Germany, 52,818; Holland (in 1917), 1,237; Italy, 8,526; Norway, 1,684; Russia, 37,800; Sweden (in 1915), 3,205; and Switzerland, 3,537.

39 in Germany, and 48.43 in Belgium (in 1913). On the other hand, the number of miles operated per 10,000 population was 25.37 in the United States, and only 3.25 in Italy, 9.07 in Switzerland, 8.26 in Germany, and 7.27 in Belgium (in 1913). Facts of this character reflect wide divergencies in length of hauls and density of traffic, and reveal one important source of differences in the level of railroad rates and in the quality of transportation service. It is to be noted also that while the property investment per mile of line was $77,953 in the United States, it varied from $25,004 per mile of line for the state railways of Western Australia to $274,027 (in 1913) for the private mileage of the United Kingdom. The capital per mile of line in practically all of the European states having national railway systems was very substantially in excess of that prevailing in the United States—being $122,054 in Austria (in 1913), $196,027 in Belgium (in 1913), $147,838 in France (in 1913), $127,251 in Germany, $84,807 in Russia (in 1911), $137,772 in Switzerland. These variations are indicative, for the most part, after due allowance is made for variations in accounting practice, of essential differences in the development and physical structure of American and European railroad systems. There are similar variations with regard to the amount of securities outstanding per mile of line among different American railroad corporations which can be explained, aside from differences in liberality of their respective policies of capitalization, by variations in the topography of the territory through which their lines run, in the character of their terminal properties, in the extent of their multiple trackage, in the degree to which their grade crossings have been eliminated, in the density of population of the country which they serve, and like factors. These differences in physical facts exert a determining influence upon capital investment and inevitably make themselves felt in the financial results of operation. These financial results are even more directly molded by the diverse standards of living that prevail in the United States and in the various European countries. This

diversity is reflected, in large measure, by the variations in the average yearly compensation paid to railway employees. In 1916, this figure, based upon the average number of employees during the year, was $891.62 in the United States, $498.47 in Germany, $376.81 (in 1913) in Italy, and $390.74 in Switzerland.

There are also less tangible differences between American and European conditions that serve to cast grave doubt upon the validity of statistical comparisons. Among the most important of these are the character of the prevailing political institutions and the nature of the dominant temperament of the people. The experience of pre-war Germany or of Czarist Russia can possess little real significance for the United States. And even the European democracies enjoy a tradition of government service, a heritage of collective enterprise, and a stratification of social classes which are largely absent in the United States. The project of railroad nationalization under American conditions must confront peculiar difficulties and involve distinctive tasks. Under the circumstances, therefore, it is apparent that comparative statistical results can serve but a secondary purpose—they can be used, chiefly, to confirm conclusions reached independently of foreign experience. Primary reliance must be placed upon the analytical method—upon the demands of the railroad situation as it has developed in the United States, in the light of the democratic character of our governmental institutions and the individualistic temper of the American people.

The argument for nationalization, as presented by its advocates, is simple and can be stated in a few brief paragraphs. The transportation function is a public function. This has been recognized by law from time immemorial, in spite of the fact that the performance of this function has generally been delegated to private individuals or corporations. Because of the legal recognition of the public status of the transportation service, the transportation agencies have been beneficiaries of

special rights and have been subjected to special duties and responsibilities. Thus, grants of power have invariably been conferred upon them to exercise the sovereign right of eminent domain, and they have enjoyed the benefits of special franchises in the public highways, and of public aid toward their construction and development in the form of land grants and financial support. These privileges, under the limitations of our constitutional form of government, can be granted, even when due compensation is made (as in the case of eminent domain), only for public purposes. On the other hand, the public nature of the transportation industries has subjected them to extraordinary obligations in the public interest. Even in the early days of the common law they were deemed to be engaged in public callings, and hence were deprived of the large freedom which, in the absence of force or fraud, invariably commanded legal protection in the case of strictly private enterprise. Common carriers were traditionally obligated to serve all who apply, at reasonable rates, with adequate facilities, and without undue discrimination in the charges imposed or the service rendered.

In more recent years, a complexity of duties and responsibilities has been imposed upon them through statutory enactment, and elaborate administrative machinery has been developed for their supervision and control. The law of public service which has thus been made applicable to the railroads is but an outgrowth of the legal attitude toward the more primitive instrumentalities of transportation: the category of common carriers which originally comprised such public callings as those of the hackman, the drayman, the stage-coach owner, the ferryman, and the like, was extended in the eighteenth century to include toll bridges, turnpikes, and canals, and with the development of steam transportation found its most important constituent in the railroad. Modern railroads are the public highways of the new world. They provide a service which is indispensable to every phase of human activity. They tend to be operated under conditions of virtual

monopoly and possess the power to levy tribute upon the communities which they serve. Through the very nature of the service which they render they mold the character of social and economic institutions and exert a tremendous influence upon the development of political life. The mere motive of private gain cannot be relied upon to adjust their activities either equitably or wisely. In the relationship between the state and the railroads public interest must ever be the paramount and guiding principle. In the words of the late Justice Harlan of the Supreme Court of the United States: "A railroad is a public highway, and none the less so because constructed and maintained through the agency of a corporation deriving its existence and powers from the state. Such a corporation was created for public purposes. It performs a function of the state. Its authority to exercise the right of eminent domain and to charge tolls was given primarily for the benefit of the public." [5]

In the beginning of railroad transportation in the United States it may have been both natural and inevitable that private initiative should be resorted to for the construction and upbuilding of railway plant and facilities. The railroad industry, like all new economic developments, was destined, at the outset, to pass through a period of experimentation, and its establishment and expansion necessarily involved a large measure of speculative enterprise stimulated by constructive imagination, venturesome spirit, bold individualism, and even ruthless exploitation bordering upon fraud and manipulation. In the early days of railroad building the essentially monopolistic character of the railway business was generally unrecognized or ignored; the tremendous possibilities of the industry, both for good and evil, were but faintly discerned; the financial practicability of the new agency was not yet definitely established; and the mechanical status and operating technique of the railroad were yet in their infancy. Under these circumstances public ownership and operation were out of the ques-

[5] Smyth v. Ames, 169 U. S. 466.

tion. Not until railroad transportation had attained a reasonable degree of maturity was the field ripe for government regulation or public management. The beginnings of the railroad, therefore, encountered little public interference; for about four decades the carriers functioned in almost absolute freedom. The public interest in the railroad problem manifested itself exclusively in liberal aid and generous encouragement.

Since the early seventies, however, the railroad industry has been recognized as sufficiently mature for public control, and the evils of unregulated private management have evoked a continuous and general demand for vigorous public regulation. The voluminous accumulation of legislative enactments, administrative orders, and judicial decisions bears witness to the intensive activity of the public authorities in their efforts to curb the abuses inherent in the operation of the public highways for private profit. For half a century, through the system of private management under public regulation, the American people have been engaged in the arduous task of attempting to harmonize the private rights of the carriers and the special interests of particular industrial groups or sectional areas with the general interests of the entire community. The results have been admittedly unsatisfactory. Speculative activity and financial manipulation did not cease with the assertion by the public of its paramount interest in the proper functioning of the transportation industry. Official investigations of the Interstate Commerce Commission disclose not a few very striking illustrations of reckless financiering even in the past two decades.[6] The transportation service has proved inadequate. Freight congestion is a frequent phenomenon, and car shortages recur periodically. The particular in-

[6] *Cf.* New York, New Haven & Hartford Railway Co. (Report No. 6569, July 11, 1914); Louisville & Nashville Railroad Co. (Report No. 4788, Feb. 9, 1915); Chicago, Rock Island & Pacific Railway Co. (Report No. 6834, July 31, 1915); Cincinnati, Hamilton & Dayton Railroad Co., and the Pere Marquette Railroad Co. (Report No. 6833, Mar. 13, 1917); St. Louis & San Francisco Railroad Co. (Report No. 5933, Jan. 20, 1914).

terests of individual carriers prevent a full utilization of existing plant and equipment, and the credit of the railroads, more largely because of their own financial misdeeds than because of the restrictive rate policy of the Government, is incapable of attracting a sufficient flow of new capital for extensions and improvements. Excessive charges have not been eliminated by public regulation, as is evidenced by the flagrantly high earnings of the stronger roads; and maladjustments in the rate structure, as between different classes of traffic, and with reference to different producing and distributing centers, have been minimized but not eradicated. Even personal discriminations are not altogether a thing of the past. Moreover, the relationship of the carriers to their employees has been such as to "flaunt the demands of justice," hinder the development of operating efficiency, and subject the transportation service to constant danger of disruption.

A long experience, it is thus claimed, has clearly demonstrated that neither unrestricted competition nor regulated private monopoly can provide an adequate transportation system. The concrete arrangements which these policies have introduced from time to time have been very largely of a makeshift character. Their objective has been negative in purpose —to eliminate such specific abuses as had become intolerable. But success in one direction has merely disclosed equally burdensome abuses in some other direction. The evils of private ownership and operation constantly change their guise, but the fact of maladjustment persists, and necessarily must persist, in the face of the merely remedial viewpoint of the philosophy of public regulation. The people must grapple with the railroad problem on a positive and constructive basis. Public interest rather than private profit must constitute the underlying motive in the organization and activities of the railroad industry, and the promotion of the general welfare must serve as the direct goal and conscious objective to be attained. Such machinery of public control must be devised as will eliminate entirely the influence of private financial gain in the molding

of railroad policy; and there must be substituted therefor, in fact as well as in theoretic contemplation, the ideal of an adequate, equitable, and sensitively progressive transportation service.

A railroad program of this character can be secured only through the policy of nationalization. Through this policy the people would come into their own. The public highways would become public property operated for the public good. The entire transportation system would be centered in a single ownership, and the railroads would function as natural monopolies without encountering the hampering and unintelligent restrictions that spring from public distrust of private monopoly, and without the temptations of exploiting their monopoly power for private advantage. Unity of ownership would bring with it unity of operation. The American transportation system would be national in scope and national in outlook. The wastes of purely competitive activity would be eliminated, and the restrictive obstacles of corporate ownership and control would be overcome. Since operating unity would constitute the normal method in the administration of the railroads, the co-existence of surplus transportation capacity in one part of the country and a concomitant lack of facilities in another would be rendered virtually impossible. The extent of plant and equipment would be limited only by the needs of the community and the willingness of the public to incur the necessary expenditures. These capital costs would be substantially lower than those incurred under private management, both because of the unification of credit centered in the United States Government, and because of the absence of the loose and sometimes dishonest financiering which has marked the promotion and expansion of many railroad properties in the past. The era of financial manipulation in the railway field would come to an end; the conception of the transportation service as a fruitful instrument for speculative activity would be destroyed. With the elimination of the profit motive, extortionate rates and charges would

vanish. Transportation would be provided at cost—as far as the service as a whole is concerned—and the greater the efficiency of operation and the economies of management, the larger would be the benefits accruing to the public in the form of improved service and reduced charges. The basic motive for discrimination—the desire, under the stress of competition, to take advantage of the principle of increasing returns and diminishing costs to which the railroad industry is subject—would likewise cease to operate under public management, and Government officials, representing the common interests of all groups and localities, could withstand the pressure of particular industries and the claims of particular sections more effectively than corporate traffic managers conscious of their responsibility to the holders of railroad securities and spurred on by the rewards of financial success. Specific rates might continue to be adjusted with reference to the value of the service, as well as to specific cost—for the forces of market competition, among other factors, would still be operative—but the rate structure as a whole, formulated by public officials for the common good, could serve as a powerful engine of socialization. Labor relationships would be immeasurably improved. The level of wages would not be depressed because of the desire for profits. The compensation of railway employees would be adjusted in accordance with the justice of their demands, and not on the basis of the strength of their bargaining power as compared with the entrenched position of powerful railroad corporations. The significance of the service of railroad labor, rather than the strategic character of its status, would constitute the dominant leverage through which its condition would be improved. Coöperation and good-will would thus displace resentment and strife, and the public would reap the benefit of increased efficiency and be spared the hardship and anxiety of actual or threatened disruption of the transportation service. In the light of all these advantages, and in view of the fact that both the mechanism of the railroad and its operating technique are now

largely standardized, the time is ripe for the nationalization of the American railroad system. Such, in essence, are the contentions of the advocates of public ownership.

The weight of American opinion is opposed to nationalization. Granting, for the most part, the desirability of the ends to be achieved through public ownership, the opponents of nationalization insist that it is but a mechanism of social control, and that the wisdom of displacing our traditional policy of private management must depend upon the practical success with which this mechanism would be likely to function in the United States. Not the abstract ideality of the program, but its relative efficiency as an instrument of public control in comparison with a sound system of regulation, must constitute the determining factor in its adoption or rejection. On this basis, a variety of considerations are urged—chiefly grounded in the character of our political institutions and the temper of the American people—which are declared to involve disadvantages so potent and far-reaching as to render both undesirable and impracticable the transformation of the American railroad net into a national transportation system.

First, and most important, it is contended that public operation would not be as efficient as private management. Even if the transportation service were more equitably administered under government control, the common weal would be diminished rather than magnified, because of decreased efficiency. Concretely, higher costs and poorer service would result. In the light of experience such an outcome would be inevitable.

The state, especially in a democracy, has never functioned as effectively in commercial and industrial undertakings as individuals or corporations subject to the spur of private gain. The energy and initiative that spring from the keen struggle for material advantage and financial success are generally lacking in government officials. Their posts are dependent upon prestige—political prestige largely—rather than upon demonstrated fitness for the tasks entrusted to them. In like man-

ner, the positions of their subordinates are more frequently secured through personal or political influence than through relevant aptitudes—civil service requirements providing but a formal test, to be followed, in most instances, by the vested claims of seniority. The morale of a staff so recruited must needs be low and its discipline lax; and the mass of employees, upon whose support political power and advancement so largely depend, neither possess the inducement for honest and efficient effort, nor are they subject to effective direction from above. Such public employment tends to increase the wages of labor above the level prevailing for similar service in private enterprise—in itself a demoralizing factor—and these higher wages are invariably accompanied by a lower level of salaries for the more important officials whose managerial ability, constructive imagination, and dynamic energy are indispensable to the progressive administration of industrial undertakings. As a result, the quality of executive capacity within the reach of the public service is inevitably inferior to that commanded by private business. Moreover, state executives are hampered in their tasks by the cumbersome mechanism of governmental organization. It is generally impossible to reach decisions quickly. In the purchase of materials, for example, the government process involves a long drawn out course of bids, contracts, and awards, but in spite of these formal evidences of caution and circumspection the profits of government contractors are notorious. The record of public business in this country is one of unwieldy organization, unnecessary complication of system, undue multiplication of personnel.

When applied to the problem of railroad nationalization, conditions such as these foreshadow intolerable operating inefficiency, flagrant inflation of costs, and serious impairment of the transportation service. The advantages and economies of unified operation and concentrated credit—objectives that are largely attainable under a reconstituted system of public regulation—cannot offset the disadvantages and losses inherent in

public management. The minor savings resulting from consolidation would be overcome by the greater wastes resulting from inefficiency. The benefits derived from government financing would be insignificant as compared with the shrinkage involved in misdirected capital expenditures. In brief, the most probable net outcome would be an insidious increase in the public cost of the transportation service and a progressive deterioration of the quality of that service.

It is further contended that, once public ownership became established as a permanent institution, the ill effects of the policy of nationalization would be cumulative. Economic efficiency involves not merely the maintenance of service standards, but their progressive development. Such development, in the past, has resulted from the efforts of railroad men endowed with a high degree of technical and executive ability and stimulated to venturesome initiative by the rewards of private advancement. The transportation service, under public ownership, would be deprived of both the initial capacity and the motive for its effective exercise. An unwieldy organization of underpaid public officials, attaining their posts, in large measure, through political patronage, would possess neither the ability nor the stimulus to institute a vigorous and continuous policy of improvement. Innovations the success of which is problematical would be ruthlessly rejected. Constructive experimentation, in spite of possibilities of future gain, would encounter hampering discouragement, because of the immediate effect upon the financial burden, and because of the timorous attitude of party politicians. And even if the present organization of the railroads were taken over bodily by the Government and the transportation properties were manned by the best qualified executives produced under the régime of private management, there would be lacking within the system of public railway administration the elements essential to the development of new brains and new capacity to take the place of the old. The great builders and masterful administrators in the railroad industry have been the product

of the competitive system. The business world would continue to develop these types of leadership, but they would find little attraction in the public service. The national railways would be forced to draw their directing personnel from within their own bureaucratic organization. The political influence would become firmly entrenched in the conduct of railway operations. The tradition of government incompetence would permanently displace the standards of economic efficiency. Proposals for extensions and betterments would tend to degenerate into the shameful "pork barrel" extravagance that has so frequently disgraced the postal and the rivers and harbors appropriations. A railroad budget would but add to the opportunities for the expenditure of public funds by "political appropriations," with resulting impairment of the railroad service. Where capital expenditures are calculated to prove politically significant—as in the construction of imposing and costly passenger stations—a policy of undue liberality would be followed; for the provision of ordinary betterments generally removed from the eyes of the electorate—as in the substitution of heavier rails, the improvement of yard facilities, and the extension of roads into undeveloped but potentially important sections of the country—an equally unwarranted policy of retrenchment would be adopted. For similar reasons passenger rates would tend to be lowered at the expense of the freight traffic, and the temptation would be strong to reduce the entire rate schedule to a level unjustified by the real cost of the service, the Government reclaiming from the public through the power of taxation the operating deficits that would inevitably ensue. And discriminatory practices—in rates as well as service—would not be entirely eliminated, although the motive of the preferences might become political instead of financial in character. Influential interests and strategic localities would still seek adjustments in the rate structure and in the distribution of equipment and facilities that are unduly favorable to themselves and unreasonably prejudicial to less powerful groups and sections of the coun-

try. The evils of the traditional tariff lobby might sink into insignificance by comparison with the abuses that would flow from concerted pressure upon public authorities endowed with unlimited power over railway rates and regulations.

And the influence of the foregoing considerations would not spend itself in the mere reduction of economic efficiency in the transportation industry. Railroad nationalization would produce a harmful effect upon our governmental institutions. The proponents of public ownership insist that the railroads are inevitably "in politics," under private management as well as under government operation, because of the tremendous practical importance of the public treatment of the carriers—that while their nationalization may not take them out of politics in every sense, it can not intensify the political evils that have accompanied their partizan activities in the past. This contention ignores the relative extent and character of opportunities for improper influence under public ownership and under private management. Because under a system of public railway administration improper influence could be brought to bear with respect to innumerable adjustments, and not merely, as under private operation, with reference to the type and scope of regulation, the nationalization of the railroads would develop a decided tendency toward more frequent and less scrupulous exercise of political pressure. Combinations of shippers would seek lower rates; powerful industries would seek preferential advantages; diverse localities would seek the expenditure of funds for questionable improvements; the army of employees would seek shorter hours and higher wages. The denial of such claims would involve political disfavor, and the political weapon would come to serve as the most potent means of approach. The mere creation of a compact, well-organized body of two million government servants, driven by self-interest to exert every effort to mold public policy in the direction of its advancement and possessing a vast measure of power for the attainment of its ends, would in itself render railroad questions subject to political and par-

tizan settlement. The method of the enactment of the Adamson law in 1916 provides a striking reflection of the tremendous power of organized railroad labor, and of its readiness to use that power ruthlessly to dictate governmental policy. The strength of political leverage would become immeasurably intensified under a nationalized railroad system, with the Government the sole owner of the railroad properties and the sole employer of railroad labor.

It is a significant fact that practically the only outspoken advocates of nationalization are the great railroad brotherhoods, loyally, if not warmly, supported by the American Federation of Labor. Railway employees, through political pressure, confidently expect to dominate the transportation industry under public ownership. This, fundamentally, is the intent and purpose of the special form of nationalization contemplated by the so-called Plumb Plan. It involves the incorporation of the spirit of class consciousness into a legislative program, and the subsequent administration of that program in accordance with the extent and power of the political pressure that can be exerted upon those temporarily in public authority. Present-day political influence by the carriers under private management possesses no such menacing possibilities. The corrupt days of Jay Gould at Albany and of subsequent disreputable episodes merely provide interesting historical data of a dead past. Today the roads act through responsible committees of high operating officials and technical experts who present their claims openly to the legislatures, the commissions, and the public. Moreover, such political influence as survives under private management can at best be exercised only upon the relatively few who regulate the railroads, and not, as under government control, upon the many who operate them. The political implications of the policy of public ownership thus become no less threatening than the certainty of operating inefficiency and economic stagnation.

§3. *The Obstacles to Nationalization*

The indictment of public ownership reflected in the foregoing contentions is both sweeping and severe. It bespeaks a rather cynical lack of faith in the integrity of American character and in the promise of our democratic institutions. Only in a measure are the fears of nationalization which it expresses grounded in actual experience, or its assumptions with regard to private management free from conflict with the facts of American railroad development.

Private enterprise is not invariably—perhaps not even dominantly—efficient, progressive, and free from reliance upon unscrupulous exploitation of strategic advantage. The story of the development of railroad transportation in the United States, not unlike the general history of industrial and commercial development, discloses both the remarkable fruits of personal initiative, and the retardation of progressive efficiency and the miscarriage of social and economic justice. Even today the improvement of operating standards is hampered by the purely individual and competitive activities of the carriers, and the possibilities of increased efficiency resident in basic reorganization of operating machinery, in the application of electric power to railroad transportation, and in the scientific determination of methods of conserving fuel, have largely failed to impress themselves upon the imagination of railroad executives. And in so far as the public welfare has been safeguarded through government regulation, the process has been a slow and laborious and costly one, developing only in face of vigorous and continuous opposition by the owners of the railway properties. While railroad men have formally recognized the public character of the transportation function for a number of decades, they have repeatedly exerted the weight of their great influence against the adoption of concrete arrangements designed to express this conception, and have invariably appealed to every legal bulwark and institutional device historically evolved for the protection of private property

rights. This negative, and often destructive, attitude of the railroads, in view of the nature of their enterprise, has resulted in the survival of serious maladjustments, in spite of a half century of governmental effort. It would be difficult to deny that the railroad owners have deliberately striven to dominate the transportation business in the United States, primarily in the light of their own private interests, and that they have measurably succeeded in their efforts. Neither the possibility of arrested efficiency, then, nor the danger of class domination are elements peculiarly and exclusively inherent in the policy of nationalization.

It may well be granted that the record of American government enterprise has not been brilliant from the standpoint of administrative effectiveness. Innumerable instances might be cited of legislative partizanship and executive incompetence, and even the judiciary—if we include the state as well as the federal courts—has not maintained an absolutely unblemished record of integrity and open-mindedness. The nation, the states, the municipalities—indeed, every American governmental unit—has contributed to the contemptuous disesteem in which public enterprise is so widely held. The results have tended to be least creditable in public undertakings involving economic, as distinct from political, activity. This tendency has been strikingly reflected in the unsatisfactory character of municipal government and administration in the United States.

It may well be granted, also, that the power of labor has frequently been used in irresponsible fashion. The struggle for economic emancipation has not always been an enlightened one. Improvement in the arts has often been retarded, the flow of industrial output unnecessarily limited, the freedom of the individual worker unduly restrained, destructive tactics employed, needless violence resorted to, the public interest unceremoniously flaunted. Many of these practices—even in the guise of deliberately formulated policies—find some justification, however, in the human ends for the attainment of which they have been utilized, in the legally entrenched

position of the forces against which the conflict has been waged, in the persistent refusal on the part of the dominant classes to recognize the necessity of labor coöperation, and in the absence of equally effective instruments for raising the status of labor. The processes of the industrial struggle as it has evolved historically largely explain the more flagrant abuses which have accompanied the development of labor organization. The restraints of autocratic industrial control have induced the methods of autocracy in the employment of the power of labor. The introduction of industrial democracy and the emergence of a positive and improved labor status would instill a new spirit of responsibility in the working masses. Under a system of railroad nationalization maintaining an equitable wage level and enlightened working conditions, constructive achievement, rather than obstructive tactics, might well become the immediate, as well as the ultimate, end of the transportation workers. Nor need the tradition of the inevitable inefficiency of collective enterprise endure. Public responsibility begets public spirit, and genuine public spirit constitutes an impregnable bulwark against private pressure or political influence. The creation of a nationalized railway system might serve as a powerful instrument of national unification: this common enterprise, touching intimately the welfare of the entire people, might serve as a stimulating challenge and as a concrete mechanism for the transformation of the mere formal exercise of political privilege into an idealized conception of public duty. The policy of nationalization looks to the future. It receives its dominant impulse, in spite of the pessimistic forebodings that widely prevail, from a renewal of faith in America and her institutions and her people.

But neither America's traditional reliance upon private management in the transportation industry, nor her failure to resort to nationalization subsequent to the Federal Control period, has been based upon deliberate choice between the advantages and disadvantages of private as against public opera-

tion. The "cake of custom" is as difficult to break in the realm of ideas as it is in the field of practical affairs. And the public attitude toward the relationship of the state to industrial action is the outcome of a deep-seated faith in the efficiency of private initiative and its superiority over collective enterprise. The American mind, consciously or unconsciously, is steeped in the philosophy of individualism. The great material achievements of our civilization were attained through the stimulus of private gain, and there is little hospitality for the suggestion that changing conditions may justify reliance upon diverse motives in the promotion of the public good. While the structure of the common law has proved itself measurably capable of modification from within to meet the changing demands of political, economic, and social development, the competitive spirit has continued to dominate both its basic ideals and its concrete adjustments. Social and economic legislation has been subject to the hampering influence of this individualistic temper, which has manifested itself in the performance of the judicial function of statutory interpretation, particularly with reference to the absolute rights and safeguards incorporated in the fundamental laws of the land by way of constitutional limitations. Forces such as these have inhibited experimentation with the more advanced expedients of social control and have retarded the progress of public regulation.

In the realm of railroad transportation, therefore, as in other fields of industrial activity, much remains to be accomplished—and can be achieved—through the regulative method. The full possibilities of the traditional public attitude toward the railroad industry have not been realized. There need be no sharp break with the past in order to safeguard much more effectively than at present the dominant public interest in the proper performance of the transportation function. Private management can be retained, but the principles and machinery of public control must be rationalized, in the light of past experience, and so adjusted as to aim at the achievement of a

positive goal rather than the mere imposition of negative restraints—at the establishment of an adequate transportation service rather than the mere elimination of railway abuse.

The philosophy of regulation, as applied to the so-called public service industries, possesses the necessary elements for the adequate promotion of the common good. It seeks to conserve the fruits of individual initiative, and at the same time to safeguard and develop the collective welfare. It recognizes the effectiveness of the profit motive in stimulating productive effort, but it undertakes to shape the character and direction of economic activity for the realization, primarily, of social rather than individual ends. Its objective is identical with that of nationalization, but it possesses the added advantage of having at its disposal the invaluable tool of private self-interest. The details of administration remain in the hands of the business entrepreneur, while the purposes of his enterprise are subjected to public guidance. Government regulation seeks to fashion the environment of industrial activity, through the formulation of the legal framework in which it may function, without dictating the actual processes of operation or the concrete arrangements for their performance. The ideal toward which such public effort is directed demands a sensitive and difficult balancing of general and specific interests, but the inherent impossibility of attaining this goal or of achieving the tasks which it involves has not been established.

It is unquestionably true that in the field of railroad transportation the results have failed to vindicate altogether the wisdom of our traditional reliance upon the regulative method. In a number of very significant directions, the positive demands of public interest have been totally neglected or unintelligently adjusted; and in some instances the free play of personal initiative, which is of the very essence of the policy of private management, has been unduly hampered, through concrete government restrictions in matters of administration. In spite of these shortcomings, however, there has been a

marked and significant advance in the processes and effectiveness of railroad regulation.

The purely remedial safeguards of the common law have been recognized as fundamentally inadequate. They provide private redress for public wrongs, and they lack the means for preventing maladjustment in the future. Exclusive reliance upon direct legislative enactments has likewise been found to be incapable of molding the activities of the powerful railroad corporations, performing the transportation function under conditions tending to virtual monopoly, in the direction of public welfare. Statutory rules are bound to be spasmodic in origin and inflexible in application; they set up rigid standards, determined by current political expediency rather than by fundamental need, and they must depend, very largely, upon the punitive methods of judicial enforcement for their execution.

But with the emergence of the method of administrative control, the policy of regulation became a potentially effective instrument for harmonizing the rights of the carriers and interests of the public. The creation and legal recognition of railroad commissions—first functioning with merely advisory authority and later clothed with mandatory power—marks an epochal stage in the development of our public law, and a crucial advance in the evolution of the regulative process. From the legal standpoint, the constitutional validity of the exercise by these commissions of large grants of legislative, executive, and semi-judicial power represents a far-sighted concession to the needs of complex social and economic conditions. From the standpoint of the regulative process, the development of these commissions rendered possible the continuous and intelligent supervision of the transportation function. The method of administrative discretion, within publicly defined limitations, displaced the method of fixed legal rule. The objective of private redress for past wrongs was subordinated to the goal of establishing a proper relationship for the future between the railroad corporations and the users of the trans-

portation service. The difficult tasks of rate adjustment, for example, could be entrusted to a body of experts in continuous contact with the problems of the railroads, and possessed of a constantly accumulating fund of experience. The public interest was thereby rendered actively articulate in the midst of the vigorous prosecution of private advantage by the owners of the railroad properties.

Administrative regulation encountered many obstacles in the course of this development. A long struggle—not yet definitely terminated—centered, for example, in the scope and character of the doctrine of judicial review. In matters of valuation, and therefore, to a large degree, in the adjustment of general rate levels, the voice of the courts is still supreme. But with regard to most questions involved in the process of railroad regulation, the dominance of these administrative agencies has been fully recognized. The Interstate Commerce Commission has come to occupy the central place in all matters affecting railroad transportation. The opportunity now lies ahead, therefore, to relinquish the purely negative and restrictive policies of the past, and to substitute therefor a constructive program of public regulation, designed to provide an adequate transportation service under the initial stimulus of private management. The essentials of such a program will receive consideration in the chapters immediately following. At this point it is but necessary to note that the unrealized possibilities of the regulative method constitute one of the prime obstacles to the adoption of a policy of railroad nationalization in the United States.

That the general public, intuitively or through reflection, is strongly influenced by the unrealized possibilities of the regulative method in its attitude toward reconstructive policy is indicated by the fact that the expedient of railroad nationalization does not command its approval. That, in the last analysis, constitutes the most potent obstacle to the relinquishment of the system of private management. While the question of public ownership of railroads has never been sub-

mitted to popular referendum in the United States or achieved the distinction of becoming a "paramount" political issue, significant evidence is not wanting that its allurements have failed to impress the imagination or arouse the enthusiasm of the people at large.

The representatives of the people, in emphasizing the purely emergency character of Federal Control and legislating the roads back to private management immediately upon the restoration of "normal" conditions, may be assumed to have been executing the mandate of the electorate. In the formulation of the Federal Control Act, the proposal that public management be continued until terminated by positive action was decisively rejected; Federal Control, under the provisions of that act, was to terminate automatically within twenty-one months after the formal proclamation of peace. Through this means the possibility of establishing an "entering wedge" in favor of government operation was avoided. The suggestion of the Railroad Administration after the armistice that Federal Control be extended for a period of five years likewise evoked no legislative response. Such advantages as might flow from the testing of public management under conditions more favorable than those of actual warfare or of the immediate transition to a peace economy, and such opportunities for deliberation and considered action in the drafting of a legislative program as might be made available through the extension of time, were regarded as insignificant by comparison with the danger that prolonged government tenure of the railroads might create a presumption in favor of a permanent policy of public ownership.

And in the development of the new legislative structure that was to determine railroad relationships subsequent to the war emergency, the question of nationalization was directly presented to Congress as a possible alternative to the continuance of private management. The reaction of our national law-makers was swift and decisive. The conventional proposals of the Public Ownership League of America, in-

corporated in the Cary bill, were unceremoniously ignored. The ingenious mechanism of the Plumb Plan, incorporated in the Sims bill, stimulated keen interest, aroused bitter resentment, caused a temporary furor, and was promptly forgotten. The advocates of the Plumb Plan insisted that they were striving to establish a principle rather than to secure acceptance of the detailed elements of a program. That principle, in essence, was railroad nationalization; and as such it was rejected as inconsistent with the desires, as well as the interests, of the American people.

Congressional action, in all these respects, was soundly grounded in dominant public opinion. That the vast membership of the United States Chamber of Commerce and of the National Grange, with practical unanimity, publicly urged the restoration of private management, was less significant than the fact that unorganized groups, in diverse walks of life, freely declared themselves in opposition to governmental railroad enterprise, and that with very few exceptions all responsible organs of public opinion voiced unqualified distrust in public management. These views, apparently, were an accurate reflection of the wishes of the electorate. During the entire history of railroad transportation in the United States no strong popular demand for fundamental change in the ownership and operation of the railroad properties has ever made itself felt. Resort to public ownership even in the narrower and less difficult field of local utilities has been relatively infrequent and very seldom accompanied by a sweeping public mandate. The policy of nationalization can be introduced only through political action. Effective political action must flow from an urgent public need and an aroused public opinion. Since the question of the need of radical readjustment in railroad relationships necessarily depends upon many intangible considerations of social philosophy and national psychology, differences of judgment are bound to persist with regard to the necessity of public ownership. Because of these differences, or because of the dominantly individualistic temper of

the American people, the policy of nationalization has failed to win wide public approval and political support. Without such approval and support no major policy of general concern can be effectuated.

In a consideration of the essentials of reconstructive policy, primary attention must be directed, then, to the further development of public regulation. The general direction of future policy will be determined by the character of the interests to be safeguarded and advanced; the concrete adjustments will involve the imposition of duties upon the carriers, the creation of rights in the public, and the provision of remedial and preventive machinery designed to restrain violations of recognized rights and duties, and to enforce positive and progressive standards for the improvement of the transportation service. The chief interests to be protected and promoted are those of the public users of the railroad service, the private owners of the railroad properties, and the workers engaged in the performance of transportation tasks. These interests are not distinct, but closely interdependent. It is impossible to meet adequately the public need of transportation service without continuous and meticulous concern for the financial interests of the carriers and the human as well as material interests of the railroad employees. Financial safeguards for the carriers, through the establishment of ample and flexible sources of operating revenue and the provision of such rates of return as will attract railroad capital, can receive public approval only when accompanied by efficiency in the transportation service and coöperation in labor relationships. The demands of railroad employees for increases in wages, improvement in working conditions, and representation in railroad control can be given serious consideration only if railroad labor, on its part, comes to realize the paramount public interest in the proper functioning of transportation enterprise, and the need of ready recognition for the just claims of capital invested in railroad undertakings. The nature of

these interests will be subjected to examination and analysis in the chapters immediately following. The essentials of reconstructive policy in railroad regulation can be profitably grouped around the three questions that follow: unity of operation and railroad service; rates, credit, and financial return; and railroad labor and continuity of operation.

CHAPTER VII

UNITY OF OPERATION AND RAILROAD SERVICE

The prime objective of reconstruction in railroad policy is to secure an adequate transportation service. The most striking defect in the functioning of American railroads in recent years—a defect which was accentuated but not created by war conditions—has been their inability to meet satisfactorily the national transportation needs. Corporate ownership and private management can be perpetuated, therefore, only if the individual interests of the carriers are sufficiently subordinated to the demands of public necessity to provide ample transportation facilities. The task of regulation is to create legal conditions surrounding the railroad industry that will render this end reasonably capable of achievement. While financial safeguards for the maintenance of railroad credit (through the equitable adjustment of the level of charges and the rate of return) and the development of stability in labor relationships (through the establishment of fair wages and working conditions and some degree of labor representation in matters affecting the interests of railroad employees) are essential to the improvement of transportation service, the initial problem is to facilitate the normal functioning of the railroad industry, through the legalization of coöperative effort, and to stimulate the fullest possible utilization of railroad plant and equipment, through the progressive adoption of means of railroad unification. Our first concern, then, in considering the essentials of reconstructive policy under a system of private management, must be directed to the question of unity of operation and railroad service.

§1. *The Nature of Railroad Competition*

Sound policy in railroad regulation must be grounded in a sound conception of the nature of the industry; and the distinctive character of the industry springs primarily from the peculiar nature of railroad competition. In ordinary business undertakings—in extractive, manufacturing, and mercantile pursuits—the automatic and dominant force of competition generally serves to protect the public against unreasonable prices and inferior goods or services. Such industries are commonly regarded as "private," and the conscious authority of the state is but infrequently invoked to modify the operation of competitive forces. Railroad transportation is differentiated from these so-called private industries because of the abnormal functioning of the competitive principle. As a result of inherent physical and economic characteristics of the railroad industry, competition is slow to arise, limited in its operation, and prone to be self-destructive. The dominant tendency in the field of railroad transportation is toward operation under conditions of virtual monopoly. For this reason, fundamentally, the railroads are declared to be "affected with a public interest," and their policies and activities are subjected to government regulation. What, concretely, are the determining factors which account for this abnormal nature of railroad competition?

Competition is slow to arise. The mere magnitude of railroad plant and facilities and the complexity of railroad operation tend to render the railroad industry "naturally monopolistic." To build and equip a railroad between two localities, even when the distance between them is relatively short, requires a vast amount of capital and involves the lapse of much time: rights of way must be purchased and graded into roadbed; tracks must be ballasted and laid; stations, freight terminals, roundhouses, shops, and power plants must be constructed; locomotives, cars, and work equipment must be procured; telegraph lines and signal systems must be in-

stalled; administrative, traffic, and operating organizations must be developed; and a sufficiently large and diversified demand for the transportation services of the new carrier must be built up to render the enterprise financially practicable. These tasks can be accomplished only through command of large resources and after the consumption of long periods of time. And the difficulties of securing the necessary capital for railroad construction are accentuated when new lines are projected through territory already served by one or more roads—when the purpose of the new construction is to compete with parallel existing lines. The duplication of railroad plant is costly and wasteful, and the financial outcome of such an undertaking is decidedly problematical.

Railroad competition is also limited in the scope of its operation. Even in those cases where the flow of traffic between important industrial centers warrants the construction of more than one system of transportation, two roads are seldom built that are in the strict sense parallel. The only hope of securing a successful financial outcome for a new railroad project which is to compete with an established railroad system, lies in the policy of tapping separate and independent local reservoirs of traffic. The new road may connect the important centers served by the old, but beyond such points it will generally diverge and serve a local territory of its own. Even where competition is most active, therefore, there will be numerous towns and villages in the territory affected that must be dependent for railroad service upon a single carrier. Because of physical and financial exigencies, railroad competition is necessarily only partial in its scope; it cannot exercise the wide influence which is possible in the manufacturing industries and in commercial enterprise.

But more fundamental than these qualities of railroad competition is the fact that it tends to be self-destructive. Even where rivalry between parallel or competing lines does exist, the normal outcome of the struggle for traffic is some form of coöperative arrangement—a more or less complete merger

of the competing interests involved. As a result there is a permanent tendency, in the field of railroad transportation, toward conditions of virtual monopoly. This tendency arises from certain underlying economic characteristics of the railroad industry.

The business of railroad transportation is subject to the economic principle of increasing returns; or more accurately stated, the railroad service is subject to decreasing costs. From one-half to two-thirds of all the expenditures incident to the provision of transportation service are, in the long run, constant. Once a normal traffic is established, there is neither a substantial increase in these expenditures because of a growth in business nor a measurable reduction in them because of a decline in the amount of service rendered. The return upon capital investment in permanent plant constitutes a fixed charge on the railroad structure; the extent of this burden is increased only when a regular and dependable expansion in the flow of traffic necessitates additions and betterments, extensions, or new equipment, and its amount is generally decreased only upon reorganization following financial embarrassment. When these readjustments are made, the return on investment again becomes an invariable charge. At any given time, therefore, the capital cost of the transportation service is relatively constant, regardless of the amount or kind of traffic carried. In order that the railroad system may function at all, roadway and tracks must be built, terminals and equipment must be constructed; and the cost of providing these facilities does not vary, within broad limits, with the temporary ebb and flow of the traffic burden. In like manner, a large proportion of the operating expenses—reliably estimated to exceed fifty per cent.—are also constant. In large measure, expenditures for maintenance of way and structures, for maintenance of equipment, for general administrative purposes, and even for conducting transportation are independent of the volume of traffic. The normal expansion of railroad tonnage makes possible a fuller utilization of existing

plant and necessitates additions only to such portion of the operating expenses as are variable. It follows, therefore, that the extent of the service can be greatly increased without a proportionate increase in cost, and that every increase in traffic leads (under normal conditions) to more than a proportionate increase in financial return. This tendency to decreasing unit costs and to increasing margins of profit renders railroad competition abnormally intense and transforms it into an almost unreasoning struggle for traffic. The diversion of tonnage from competing lines becomes so manifestly advantageous that resort is had to any reduction in the level of rates, short of the actual out-of-pocket cost, that will attract the business. Destructive rate-wars and unjust discriminatory practices are the inevitable tools of the struggle, and the foundations are thereby laid for the complete cessation of the competitive process.

The fact that railroad expenditures are so largely fixed or constant accounts for another significant characteristic of the railroad industry. The transportation services of the railroad are largely rendered at joint cost, and this further operates to intensify the struggle for traffic. Only a small proportion of the operating expenses, and even a smaller part of the capital costs, can be allocated to specific shipments of goods or even to specific classes of service. The constant expenditures are incurred in support of the transportation structure as a whole. Only the variable expenses, the out-of-pocket costs, the outlays that would be saved but for the performance of a given transportation task (such separable expenditures as those for loading and unloading), can be definitely attributed to particular types of service or to the carriage of particular units of freight. Interest on capital invested in permanent plant, maintenance charges on roadway and track and equipment, upkeep costs for terminal facilities, and expenses of general administration do not vary proportionately with fluctuations in volume and character of traffic, and although they constitute an integral part of the total cost of every transportation service

rendered, they cannot be apportioned, without frequent reliance upon arbitrary allocations, among the innumerable and highly diversified services performed by the transportation system. In spite of recent advances in accounting practice and the development of ingenious devices for the separation of expenditures, it is still impossible to ascertain the specific cost of a specific service in the railroad field. As a result, the lowest remunerative rate at which each transportation service may be rendered is practically impossible of determination, and the profitable limit of rate reduction, aside from the influence of actual out-of-pocket costs, becomes largely a matter of the interaction of intelligent guesswork and external pressure. Under the stress of these conditions ruinous and destructive rate-cutting is a natural consequence of active competition.

The fact of increasing returns and joint costs, then, tends to render railroad competition self-destructive. The over-keen rivalry of competing lines, induced by the prospect of profits that increase more rapidly than the growth of traffic and accentuated by the lack of accurate knowledge as to real costs, inevitably leads to a realization that survival is possible only through coöperative effort. The normal result of the competitive struggle, therefore, is an understanding, formal or informal, as to division of traffic and maintenance of rates; a consolidation, more or less complete, of railroad properties or of transportation systems; the establishment, in some degree, of identity of interest and unity of action. There is a permanent tendency, in the free functioning of the railroad industry, toward the dominance of monopoly control.

§2. *Private Operation and the Competitive Principle*

Our system of regulation prior to the Federal Control period failed to reflect a consistent recognition of the essentially monopolistic character of railroad transportation. One of the fundamental defects of that system was its insistence on the enforcement of the competitive principle. This defect, unfor-

tunate and harmful as it has proved to be, arose quite naturally in the development of public control. Railroad regulation was the product of popular animosity against the exorbitant charges and unbridled discriminations of private management. Accordingly, when the states undertook to establish a system of control that would curb the misused powers of the carriers, there was no thought that regulation might be desirable as an aid toward more efficient operation or as a protection to the roads themselves against the effects of destructive competition. The economic characteristics of the railroad industry were still unrecognized, and the time was not yet ripe for a constructive railroad policy. Since competition had been accepted as the chief means of securing fair dealing in ordinary industrial enterprise, our legislators assumed that like results could be obtained in the railway field through the enforcement of competition—ignoring the fact that many of the most striking evils of railroad practice were largely the result of intense competition.

The chief source of railroad abuse was deemed to be monopoly. The report of the Windom Committee of the United States Senate, submitted in 1874, provides an interesting illustration of this attitude. This Committee, authorized to investigate the need of federal regulation, recommended the construction of a government railroad between the Mississippi River and the Atlantic seaboard, and the improvement of waterway facilities. It was believed that the operation of a government owned railroad, which could not be drawn into any monopolistic arrangement with the private carriers, coupled with the competition of the new waterways, would effectively check the evils of private management, render federal regulation unnecessary, and provide an adequate solution of the railroad problem. While this conception, in its initial immaturity, has not continued to the present day, there has been little abatement of the deep-seated distrust of monopoly which gave rise to this early attitude toward the railroads. The policy of enforced competition has persisted, in spite of the

clearer recognition of the nature of the railroad industry and the adoption of stringent measures of positive control.

What are the concrete forms in which this policy has found expression? First, there is the anti-pooling clause of the original Act to Regulate Commerce. Prior to 1887 railroad managers had secured some relief from the pressure of competitive practice through the device of pooling traffic, or revenue, or both. The purpose and effect of these pooling arrangements were to eliminate the motive for rate-cutting, to stabilize railroad charges, and to prevent the members of the pool from pushing competition to financial destruction. Widespread and frequent resort to this method of coöperation was a natural outcome of the character of railroad competition. But pooling was viewed with distrust because of the taint of monopoly—the fact that railway service, for the most part, remained on a competitive basis, was not regarded as a sufficient safeguard—and the prohibition of pooling was incorporated into the Act of 1887. And in 1897, a decade later, the policy of enforced competition was further extended through the decision of the United States Supreme Court in the Trans-Missouri Freight Association case whereby the Sherman Anti-Trust Act was declared to be applicable to the railroads. There was a clear failure, once more, to distinguish between the naturally monopolistic character of the railroad industry and the artificial attempts to eliminate competition through contracts and combinations in restraint of trade in the industrial field. In this manner railway rate agreements, short of pooling, were likewise invalidated, and the initial step was definitely taken toward the prevention of actual merger and consolidation between competing carriers. As a result of the Northern Securities decision of 1904 and of subsequent determinations, the Supreme Court, in interpreting and applying the anti-trust act, has rendered illegal one form of railroad coöperation after another, as the carriers have attempted, through holding companies, mergers, and leases, to circumvent the prohibitions of the law. Finally, the railroad provisions

of the Clayton Act of 1914 gave concrete legislative sanction to the results of judicial interpretation. Railroads were prohibited from purchasing, except for investment, the whole or any part of the stock of competing carriers "where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce." The aggregate effect of the policy of enforced competition thus briefly outlined was to obstruct the natural development of the railroad industry. Coöperation between competing lines constitutes a dominant tendency in the normal functioning of transportation enterprise. Pooling arrangements, rate agreements, consolidations and mergers are but forms of railroad coöperation. They serve to free both the public and the carriers from the evils of unrestrained competition, and they provide the necessary basis, when subject to the supervision of public authority, for the development of an adequate transportation service.

But this policy of legally enforced competition was not the only factor that caused the competitive principle to dominate the activities of the railroads. The system of private multiple ownership of the railroad properties placed further obstacles in the way of helpful coöperation: it prevented such common utilization of plant and such unification of facilities as might be essential for the promotion of the general transportation service. There are in the United States hundreds of independent railroad corporations operating systems of the first rank or less important "short line" roads. In so far as these carriers operate competing lines, legal restrictions serve to confine the scope of their coöperative relationships within very narrow limits. But even within the scope of legal action—in the case of non-competing railroads and as regards those forms of coöperation, such as the joint use of terminals, not prohibited by law—the powerful motive of private profit has largely inhibited the development of coöperative effort. Every

railroad corporation is impelled by its own financial welfare to exploit for its exclusive benefit any special economic superiority it may possess. If a given company owns or controls a short and cheap route between important centers, or a large and strategic terminal, or valuable wharfage facilities—differential advantages without the legal reach of other lines—it will seek, in the very nature of the case, to secure to itself alone the financial fruits of these advantages. The convenience of competing lines and the needs of public interest will be regarded as secondary considerations. Each road seeks to obtain all the traffic it can handle profitably, regardless, equally, of whether other carriers might transport it more cheaply and expeditiously, or whether its acceptance will cause congestion on connecting lines. Its own equipment and facilities are reserved primarily for its own business; private profit rather than public advantage is the determining factor in their disposition and use.

The fundamental fault of our system of railroad regulation in this matter is not that it has put actual obstacles in the way of these necessary coöperative relationships. The defect is negative rather than positive. The provision of adequate facilities, the unification of terminals, the joint use of equipment, the disposition of strategic water-front locations, the routing and control of traffic—all these and many other adjustments affecting the adequacy of the transportation service, present problems of urgent public concern which have failed to evoke government action. They have been largely neglected by both state and federal authorities because railroad regulation, as it has developed in the past, has been essentially restrictive and not constructive; it has aimed to protect the public against positive abuses, not to provide the community with an efficient system of railroad transportation. The evil effects of this neglect are coming to be felt with constantly increasing pressure. These chaotic competitive conditions rendered the war task of the railroads impossible of satisfactory accomplishment under private management, and the normal

growth of the traffic burden is exceeding the transportation capacity of our uncoördinated railroad structure. Just as long as the transportation service is provided by a large number of separate and distinct operating companies, the profit motive will constitute an ever-present obstacle to railroad coöperation for purposes of efficiency; and just as long as our system of public regulation ignores the necessity of evolving and enforcing suitable coöperative arrangements, this obstacle will remain insurmountable and the railroads will continue to function on a purely individual and competitive basis.

§3. *The Need of Unification*

We have assumed, at least by implication, that the public welfare demands a more complete unification of all transportation facilities than was possible under the traditional system of public regulation. Our present task is to examine more concretely the extent and character of this need, and the chief advantages likely to flow from its fulfilment.

We have already noted that the transportation service has failed, in recent years, to keep pace with the growth of industrial activity and the expansion of traffic demands. Both the extensive and the intensive development of railroad plant and equipment have proved inadequate to meet the constantly increasing burden of transportation needs. The frequent recurrence of car shortages, freight tie-ups and congestion, delays in traffic movement and embargoes, and the threatened collapse of the entire railroad structure which led to the assumption of Federal Control, are but tangible evidences of this inadequacy. Under these circumstances, it is obviously imperative that the best and most efficient use possible be made of the existing plant. This can be accomplished only through far-reaching coöperative arrangements. The term "pooling," better than any other perhaps, suggests the character of the need—"pooling" as applied to the entire complex of facilities, organization, and resources that constitute the transportation system. By

this means alone can the railroad plant as a whole be fully utilized. If one carrier or one section of the country possesses a surplus of tractive power or rolling stock, while shortage exists elsewhere, the public interest can best be served by placing the surplus power or equipment at the disposal of the general transportation service. In like manner, if the carriage of necessary tonnage is to be facilitated, terminals, shops, and wharves must be open to all roads on equal terms. Freight must be routed over the lines best able to move it to its destination. The flow of traffic must be controlled, if necessary, by general embargoes established in response to public need, and not by special embargoes issued by individual roads to meet the exigencies of local congestion or corporate advantage. In a word, the possibility of pooling all available railroad resources, under public direction and with due provision for adequate compensation, constitutes the most fundamental requisite for the improvement of the transportation service. This fact was recognized during the war period. The need of unity of operation was one of the effective causes of Federal Control, and the marked success with which the Railroad Administration's program of unification was executed provides the most significant contribution of the government effort to permanent reconstructive policy. The twenty-six months of unified operation have led to a general realization of the substantial advantages by way of improved and increased service that can be derived from railroad coöperation. This realization has paved the way for a reversal, eventually, of our historic policy of enforced competition, and for the provision of orderly methods of unification.

But aside from the acknowledged necessity of a greater degree of operating unity as a means of securing fuller utilization of railway plant, unification promises to eliminate or to minimize many of the other difficulties inherent in a transportation system which consists of a large number of independent and competing railroads. One of the most important of these difficulties arises from the unequal financial effect of any given

level of rates upon the various roads to which it applies. Under prevailing conditions some carriers are bound to possess marked advantages over others—in physical structure, in financial organization, in operating efficiency, in density of traffic, in progressiveness of management. In so far as these advantages are the result of superior skill and initiative they constitute a proper basis for differential returns. But in so far as the emergence of excess profits is the result of accidental factors or of the general development of the community, it is inconsistent with the adequate protection of the public interest, in view of the character of the transportation function, to recognize the particular carriers involved as the sole beneficiaries of these returns. Shorter routes, better grades, more favorably situated terminals, and more thickly populated territory are among the factors which tend to differentiate strong from weak roads, but they do not justify exclusive private appropriation of the savings that result from these advantages. Railroad rates, however, must be so adjusted as to cover operating expenses and provide a fair return for all the roads, if the public is not to be deprived of essential transportation service. The stronger roads often prosper under a schedule of charges that drive the weaker roads to ruin; and the provision of adequate revenue for the weaker roads frequently leads to excessive returns for the stronger. What are the demands of public policy in the circumstances? The nature of the difficulty and the character of its solution will receive further consideration in the next chapter, in connection with our discussion of rates and financial return. It is obvious, however, that a far-reaching policy of unification would help dispose of this so-called strong and weak road problem. Any policy which proposes the orderly development of railroad consolidations, as an adequate policy must, and does not limit itself to the mere enforcement of joint use of facilities, is bound, through the consequent merging of the weaker companies with their stronger competitors, to facilitate the task of rate regulation. Rate schedules could then be uniformly applied to all the

roads in a given region, without starving some and allowing unreasonable profits to others.

The marked decline in railroad credit during recent years has likewise proved a source of embarrassment, and the need of strengthening and coördinating the financial operations of the railroads was another effective cause of Federal Control. Lack of credit has obstructed the necessary flow of capital into railroad enterprise: it has prevented the satisfactory development of new construction, has reduced improvements in equipment and facilities, has resulted in deferred maintenance of existing plant. Impairment of the transportation service was the inevitable effect. While absence of unification has not been the most fundamental obstacle to attracting capital to the railroad field, the legalization and encouragement of railroad consolidations may reasonably be expected to improve the condition of the roads in this respect. Credit may be pooled as well as facilities. The advantages which accrued during the war emergency through placing the credit of the Government back of the railroads, in order that needed extensions might be made, may be permanently secured, in large measure, through supporting the smaller roads by the combined credit of the great railroad systems. The substitution of a relatively small number of great transportation systems, for the numerous independent and competitive railroad corporations of the present day, would render less difficult the adequate support of railroad credit, just as it would increase the extent of transportation service and facilitate the task of rate regulation.

Not only would service, rates, and credit be radically and favorably affected by a change of policy in the direction of greater unification, but many of the remaining problems of regulation would be materially simplified. The evils of overcapitalization and financial manipulation from which both the public and the railroads have suffered incalculable harm in the past could be the more easily combated with substantial reduction of the number of independent carriers through the process of consolidation. The function of regulating railroad capi-

talization would be naturally centered in the Federal Government, and the satisfactory performance of the task would be more easily effected. There would be a tendency to reduce the complexity of security issues and to eliminate worthless paper —to the investor's enlightenment and protection—and to improve the credit position of the railroad corporations—to the advantage of the public. Relief from the stress of competitive pressure would also remove the primary motive to discriminatory practices, in service as well as in charges, and the task of the Interstate Commerce Commission in enforcing equality of treatment as between different shippers, industries, and communities would be correspondingly lightened. Labor relationships would be more satisfactorily adjusted because of the greater ease with which employment could be classified and wages and working conditions standardized. And, as the economies of operation that can reasonably be obtained through unified practice come to be realized, reductions in the rate level might become possible without involving discouragement to capital investment.

A policy of unification seems imperative, therefore, if the best interests of the public are to be served. Fuller utilization of plant and facilities, greater uniformity in financial returns, better credit, more stable securities, less likelihood of resort to discrimination, improved labor conditions, and lower rates—in short, a more adequate transportation service—may well be expected to result from the relinquishment of our historic reliance upon competitive operation in favor of a policy of unification. What, now, are the concrete forms and specific principles best suited to secure the advantages of such a policy?

§4. *The Forms of Unification*

The problem of unification on the practical side is largely a question of the degree to which the process ought to be carried. There is need of the maximum of unification conducive to the maintenance and development of high standards of

transportation efficiency, short of the creation of such great private monopolies as may grow too powerful for public safety or too unwieldy for advantageous operation. The available expedients vary from the simple device of repealing repressive anti-monopoly legislation, to the establishment of a single private company by which the entire railroad industry might be operated.

We have noted that our past legislative policy has arrested the natural trend toward railroad coöperation and consolidation. The repeal of the anti-pooling clause of the Act to Regulate Commerce, and the removal of the railroads from the scope of the anti-trust statutes—the reversal, in other words, of our traditional anti-monopoly attitude toward the railroads—would doubtless encourage a resumption of this broken development. The repeal and modification of these laws constitute a first essential to any effective change in regulative policy. Taken by itself, however, such a program would certainly be inadequate and would probably prove dangerous. While progressive consolidation into a much smaller number of great transportation systems would doubtless result, the primary motives underlying this process would be those of private profit rather than of public advantage. The plans of consolidation, if formulated freely and without public supervision, would be directed to the attainment of corporate ends, and would probably involve the financial destruction of the weaker roads by the stronger. The public might thereby be deprived of the necessary and important service of short connecting lines, and the position of the smaller carriers, and of their security holders, might be needlessly jeopardized. Merger *per se* is not necessarily desirable. If its dominant purpose is not to secure greater operating efficiency or increased financial economy or a more equitable adjustment between private rights and public interest, but the mere formation of irresistible competing units, capable of destroying such carriers as remain outside the controlling systems, the tendency to consolidation may well be regarded as fraught with dangerous possibilities.

The next available course, then, is to permit consolidations "in the public interest." This policy of permissive, rather than free, unification would involve, as before, the repeal and modification of the old laws, and would necessitate the enactment of new legislation authorizing the regulatory body to investigate and pass upon such projects of consolidation as might be submitted by the carriers. Approval would be granted, presumably, only in those cases where the proposed program of consolidation is in harmony with public transportation needs, and does not affect adversely the best interests of all the carriers involved. The Interstate Commerce Commission, in its memorandum to the Senate Committee on Interstate Commerce, sanctioned this policy of permissive consolidation. It was felt to be necessary in order to harmonize the system of regulation with the nature of the railroad industry, and it was believed that the public interest would be adequately safeguarded through the control of the regulatory body. This solution is safe; it is negatively correct. But it cannot be reasonably expected to eliminate the strong and weak road problem, and it is not likely to result in such a degree of unification as would secure the full utilization of railroad plant and equipment. Consolidation would still remain voluntary. The extent to which unity of operation is secured would be dependent upon the initiative of the carriers. Too much would still rest, therefore, on the motive of corporate advantage in the arrangement of the new systems. In some degree, without doubt, the stronger roads would voluntarily absorb the weaker lines; for a line that is weak when standing alone may prove to be a valuable connection or feeder for a larger system. But in most instances powerful companies would naturally refuse to include in their mergers, lines whose routes are circuitous, whose physical condition is poor, whose credit is weak, and whose contribution to the contemplated system is of no strategic value. These voluntary consolidations would be directed primarily to the creation of more profitable operating arrangements; the process of unification would be neither sufficiently

complete nor sufficiently systematic to assure the desirable improvement in the transportation service. This policy of permissive unification is essentially the alternative that presented itself prior to the assumption of Federal Control at the end of 1917. The decision of the President to resort to public operation was determined, from the standpoint of operating requirements, by the belief that effective unity of effort could not be secured through voluntary coöperation; and it is the consensus of competent opinion that the policy of the Government was both wise and necessary.

We are forced to the conclusion, therefore, that compulsory consolidation is essential to the orderly achievement of operating unity. The legislative program for compulsory railroad consolidation includes the repeal of the old restrictive laws—as in the policy of free unification; the enactment of legislation permitting mergers and other coöperative measures determined to be in the public interest—as in the policy of permissive unification; and the provision—distinctive of this policy—that if any particular consolidation or merger not voluntarily entered into by the carriers appears necessary or desirable to the regulatory body, it shall have power to order the adoption of the needed measures of unification. This power would flow from the duty of the state to provide adequate transportation service, and its exercise would involve thoroughgoing control over rates and financial return, in order that the powerful monopolies thus created might not function in contravention of the public interest. The presumptive outcome of such measures would be a transportation system comprising a relatively small number of highly monopolistic railroad companies, each controlling the traffic in its own field and maintaining a large measure of coöperation with the rest of the system. In the course of time, if the program is carefully supervised by the regulatory body, a system of regional railroad companies would probably be developed, and the unification essential to operating efficiency thereby achieved. Such a process of consolidation, though compulsory, would be gradual and natural; the

danger of creating unwieldy and unmanageable organizations would largely be obviated; the spirit of competition, as far as service is concerned, would continue to persist between the developing systems; and the advantages of local contact and direct relationship between the management and the public would not be entirely sacrificed because of the growing concentration of railroad ownership and control.

This policy of compulsory consolidation must be distinguished from the regional railroad plan as commonly advocated. The usual proposal for the establishment of regional railroad systems is but one form of the policy of compulsory consolidation. It contemplates a procedure somewhat as follows. A tribunal would be appointed to divide the country into a number of transportation regions, or to formulate a number of groups of roads to be combined into regional systems; it would establish the fair value of the properties in each of the several regions and prescribe the amount of capital to be issued by the new companies; it would supervise the capitalization and organization of these regional companies and the issuance of their securities in exchange for those of the old roads, and would finally install them as new corporate managements. Aside from the magnitude of the tasks and the far-reaching character of the responsibilities to be placed in the hands of the tribunal, the mechanical nature of the methods involved in this program must militate against its ready acceptance. Compulsory consolidation is desirable; but if the outcome is to be stable and yet flexible, and its initiation not entirely from without, the process must be gradual. The scope and character of our future regional systems should be developed with some degree of spontaneity. If the Interstate Commerce Commission, in pursuance of a definite policy of unification, were authorized to order from time to time railroad mergers deemed desirable in the public interest, the same ends would ultimately be attained as through the regional railroad plan, with the added advantages of a more natural grouping of the roads and the retention of some of the desirable features

of the inter-system competition of the present day. Obstruction on the part of the carriers would be minimized, and the systems would develop in some conformity to changing conditions. And there is reason to believe that such a program of compulsory consolidation would result, in the end, in as greatly unified a system of coöperation as the traffic needs of the country require.

Chiefly for the sake of logical completeness, one further possibility may be mentioned. We could adopt outright, or, under the regional plan, gradually develop, a system of railroad transportation under the control of a single private operating company. By this means the principle of unification would be extended to its furthest limits. This suggestion can be disposed of without detailed consideration, because it is the height of improbability that such a plan would ever approve itself to the American mind. Public distrust of private monopoly is too deep-rooted to tolerate such an all-embracing control of a fundamental industry. The existence of a private corporation in which is centered the ownership and control of all our railroads would justly be regarded as an *imperium in imperio* constituting an ever-present threat against the free development of our democratic institutions. Only in time of emergency, to meet the demands of national necessity, does a need for such complete unification arise. It might be desirable, by way of preparedness, to enact legislation permitting the easy and rapid concentration, in a manner previously formulated, of all the railroad systems that may exist at any given time into a single operating unit. But in time of great public stress there is need not only for complete unification of railway effort, but also for complete coördination of the efforts of the roads with the activities of the Government. It is probable, therefore, that even on those extraordinary occasions when the process of unification must be pushed to the utmost in the public interest, some form of government operation analogous to that of Federal Control would prove to be desirable.

The emphasis of the preceding discussion has been placed

upon railroad consolidation, the actual merger of corporate entities, as the primary means of attaining operating unity. We must recognize, however, that important steps toward unification may be taken short of actual consolidation, and that even the adoption of a far-reaching program of compulsory unification would not dispense altogether with the necessity of such measures. The merger of competing or connecting lines provides the most certain assurance of their future harmony of action. But it is impossible, even if it were desirable, that all necessary and feasible mergers should be accomplished instantly. The policy of piece-meal consolidation, whether voluntary or compulsory, necessarily contemplates the existence for a relatively long period of time of a large number of independent carriers; and even the regional railroad plan proposes the establishment of a number of distinct transportation systems. In the absence of complete consolidation, therefore, it is necessary to provide for a reasonable measure of coöperation between the remaining individual companies and between the newly created separate systems. This coöperation can be secured only if the regulatory body is vested with power to order such joint or common use of facilities as may be deemed desirable in the interest of the general transportation service. It is an integral part of the regulative function to promote the development of equal, safe, and adequate railroad service, and authority to compel the rendering of such service should reside in the governmental agency charged with the protection of the public welfare in the field of transportation. If the Interstate Commerce Commission were vested with authority to compel the railroads to consolidate and to share their terminal facilities, wherever desirable, due provision being made for proper compensation in each case, one of the most striking sources of waste and inefficiency would be eliminated. The amelioration of terminal difficulties alone would offset in large measure the existing shortage of railroad plant. But the program need not stop there. Compulsory pooling of rolling-stock and equipment, unified control of embargoes, and government regulation

of priority of shipment and routing of freight, in periods of traffic congestion, would lead to substantial improvement in the transportation service. In the course of time the growth of railroad consolidation would render these steps less important. But in the beginning, the enforcement of such coöperative relationships would constitute a necessary complement to the more formal policy of unification previously outlined.

§5. *The Regulation of Railroad Service*

While the effects of unification would tend to pervade all aspects of railroad management and regulation, we have seen that the primary advantages of this policy would manifest themselves in the field of service. The establishment of great transportation systems, the joint and common use of railroad facilities, and the unhampered development of coöperative measures would render possible the full utilization of carrying capacity, and would subject the aggregate of railroad plant and equipment, irrespective of ownership or control, to the needs of the general transportation service. Even under a régime of extensive unity of operation, however, direct public regulation of railroad service would still be necessary. Adequate facilities must be provided (in addition to the fuller utilization of existing plant and equipment), and service standards must be established calculated to remove discriminatory, unsafe, and inefficient service practices.

The character of railroad regulation has been molded very largely by changing public conceptions of the dominant defects of private management. In the beginning, exorbitant rates constituted the outstanding evil chargeable to the railroads; and it is from this fact that regulative policy took its point of departure. Accordingly, the early efforts of the states were directed to the reduction of railway charges. By 1887, when the Act to Regulate Commerce was passed, the public viewpoint had changed. The general level of railroad rates, as a [redacted] of the combined influence of business prosperity, techni-

cal improvements in operation, destructive competition, and restrictive regulation, had entered upon a noticeable decline. But the question of the relativity of rates—the problem of discrimination—had arrested public attention; and the primary purpose which actuated the beginnings of federal regulation was to curb the abuses of discriminatory practice. The efforts of the Interstate Commerce Commission for the past three decades have been largely directed toward the elimination of these maladjustments. To a very measurable degree these efforts have met with success.

In recent years, however, with the growth and diversification of the transportation burden of the carriers, the public welfare has suffered most strikingly because of the inadequacy of the railroad service. The emergence of service difficulties cannot be attributed to any single factor. The punitive measures of the earlier regulation, and the restrictive rate policy which, for good reason or bad, accompanied the development of the powers of the Interstate Commerce Commission, reduced the flow of transportation revenue to a point incapable of maintaining railroad credit in competition with the capital demands of industrial enterprise, and of permitting the progressive financing of improvements out of surplus earnings. In a large measure the railroads themselves contributed to this unsatisfactory status. The financial manipulation of a few of the carriers—a heritage of the early days which has been perpetuated in certain quarters up to our own time—has helped to discredit the integrity and standing of the many. Overburdened capitalization, no less than insufficient revenue, has frequently served to hamper the satisfaction of the capital needs of the railroads. And the recent periods of increasing wages and rising commodity prices, unaccompanied by a flexible and responsive rate structure, has operated to complete the destruction of credit for many of the carriers. Under these circumstances railroad plant and facilities failed to develop with the expansion of the traffic burden. The transportation service deteriorated; car shortages, with disastrous industrial

effects, became frequent occurrences; freight congestion came to be a familiar phenomenon, and freight embargoes normal expedients. Even prior to the war, therefore, and in much greater measure during the period of the emergency, the public mind was increasingly impressed with the realization that the ultimate criterion of the success of a transportation system lay in the quantity and quality of the service it could render. The need of service regulation became urgent, and the demand for its introduction insistent.

Such regulation of railroad service as has been operative in the past was molded very largely by the activities of the states. The results of this experience have proved to be entirely inadequate, and, in many respects, distinctly harmful. The very fact of state regulation has subjected the carriers to the conflicting standards of a multiplicity of masters. The conditions of commercial and industrial enterprise in the United States inevitably lead to the dominance of interstate or national, rather than intrastate or local, traffic, and the physical structure and operating organization of all of the more important American railroad systems involve a transportation service that normally transcends the artificial boundaries of state lines. Under the system of independent state jurisdiction over matters of service, however, the carriers have often been subjected to the hampering and confusing restrictions of a dozen or more different sets of regulations affecting safety appliances, character of headlights, full crew requirements, and other operating practices. These conflicting stipulations have imposed needless trouble and expense upon the railroads, while their lack of uniformity has obstructed adequate enforcement. Service discrimination between different localities has also resulted from this method of regulation. The prescription of unusually low carload minima, for example, has given to the shippers of the states establishing them a disproportionate share of the available railroad equipment; and the statutory allowance of unusually long periods of "free time" for unloading has induced carriers to keep their transportation equipment, as far as prac-

ticable, out of the states in which such provisions are enforced. In many instances legislation of this character has been intentionally designed to produce discriminatory effects—the efforts of the states being purposely directed to the enactment of such measures as would prove especially favorable to local shippers. But state service regulation has proved inadequate, also, because of its primary reliance upon the establishment of absolute and concrete standards through direct legislative enactment, rather than upon the method of administrative control. Although more than one-half of the state railroad and public service laws enunciate the general principle that the service must be reasonable and the facilities safe and adequate, a much smaller proportion of them vest sufficient authority in the state commissions to render these requirements effective. In the field of service, more than in any other, the necessity of continuous and discretionary administrative supervision has failed to be generally realized. The prevailing status, therefore, in spite of a noticeable tendency toward the recognition of the superiority of commission regulation of service, is still one of statutory prescription of minute and inflexible rules designed to govern the methods of operation. Such rules invariably prove unduly rigid, if not oppressive. Finally, state regulation of railroad service has been concerned, in large measure, with the details of management rather than with the adequacy of plant and equipment, the extent of utilization of transportation facilities, the standards of operating performance. The need of removing obstacles to coöperation, and of stimulating a reasonable degree of unity of operation, has been entirely neglected. Full crew laws, reciprocal demurrage laws, provisions limiting the number of cars in a train, stipulations prescribing the number of trains to be run, and similar details of management—frequently conflicting as between different states—have dulled the spirit of initiative and have hampered the development of efficiency. In view of all these circumstances, state service regulation has come to be recognized as faulty in scope and inadequate in method; many of its provisions are

undesirable in purpose and some are fundamentally wrong in principle; the general outcome has been confusing, discriminatory, and unnecessarily restrictive.

Our traditional system of federal regulation touched only the outskirts of the problem. Aside from the mere declaration that "reasonable and equal facilities for the interchange of traffic" should be provided, the Act of 1887, and subsequent amendments prior to the war period, largely neglected the question of railroad service. The frequency of railway accidents finally aroused Congress to action, and the series of safety appliance acts, together with certain supplementary measures motivated by the same purpose, were placed upon the statute books. While these laws are of unquestioned value in providing minimum standards for the enforcement of safety of operation, they touch but a small phase of the complex question of transportation service.

Not until the pressure of war traffic had emphasized the chaotic character of railway operation under the system of private multiple ownership and the hampering insufficiency of railway plant and equipment as organized and administered, was any law applying essentially to the problem of service enacted. In May, 1917, the Esch Car Service Act was passed, vesting in the Interstate Commerce Commission authority to control "the movement, distribution, exchange, interchange, and return" of cars. In August of the same year the enactment of a priorities statute enabled the President to center in a Director of Priorities the entire question of determining the order and extent of preferences in the movement of freight under conditions of congestion, car shortage, and general inadequacy of transportation facilities. Through these laws steps were taken toward the establishment of a unified supervision of the coöperative use of equipment and a centralized control of traffic. These new acts, however, only foreshadowed the character of future legislation. Before their effectiveness could be tested adequately, the complete unity of operation of the Federal Control period had come to supersede them. During

the twenty-six months that followed, the American people were afforded their initial opportunity to assess the advantages of unified use of equipment and facilities, and of uniform standards of service and operation. Federal Control brought sweeping reforms in the direction of coördination and unification—in demurrage rules, freight classifications, interchange of equipment, joint use of terminals and shops, and in many other details of operating organization and practice. In spite of the benefits flowing from these policies and activities of the Railroad Administration, however, the war burden upon the railroads was so great that the character of the transportation "service" under Federal Control was generally regarded—as far as the immediate public reaction is concerned—as distinctly unsatisfactory. The far-reaching significance of the improvements in operating practice initiated during the Federal Control period did not receive due recognition. But the war experience did succeed in exerting an important influence upon permanent railroad policy. Most of the plans "for the solution of the railroad problem" submitted during the months following the armistice recognized the necessity of some degree of service regulation. The Interstate Commerce Commission, in its memorandum to the Senate Committee, indicated the need of more complete federal control of transportation service, and recommended that its powers be so extended as to include authority "to require adequate service." [1]

In the development of a permanent and effective system of service regulation, great care must be exercised to avoid undue governmental interference with the technique of operation and the details of management. The basic ground for the retention of private enterprise in the field of transportation is the desirability of safeguarding the fruits of personal initiative as they are reflected in vigorous and progressive administration. Just as the profit motive may be deadened by unreasonable financial restrictions, so the free play of private initiative may

[1] Senate Hearings, pp. 236-237.

be destroyed through minute and rigorous formulation by public authority of the methods of the productive process. Encroachment of regulative policy upon the realm of internal management is bound to prove detrimental to operating efficiency. It involves actual public participation in the performance of the transportation function instead of mere legal adjustment of the relationship between the carriers and the people for the promotion of the general welfare. Initiation and enforcement by the Government of concrete operating details and minute service practices can be based only upon an accepted faith in the economic superiority of public over private enterprise. Such conviction should lead to railroad nationalization rather than to the policy of regulation. The regulation of service through the control of operating processes is but a halfway measure, repressive in spirit and negative in result; it renders impossible of attainment either the full fruits of public operation or the acknowledged benefits of private management. The essential objectives of railroad regulation, in the field of service as in the matter of rates and labor relationships, are to safeguard the common interest against monopolistic abuse, and to promote the public good through the provision of adequate transportation facilities, without sacrificing the advantages of private enterprise. The conservation of free initiative constitutes as integral a part of the philosophy of regulation, under a system of private railroad management, as conscious guidance and control by public authority.

In the light of this conception of the relationship between the state and the carriers, the purpose of service regulation consists in the development of such a legal framework within which the railroads may operate, as will render possible the fullest and most flexible utilization of existing plant and equipment, the provision of adequate facilities, and the enforcement of reasonable standards of performance.

In order that the carrying capacity of the railroads may be fully and flexibly utilized, there is need of legal authorization and machinery for the general "pooling" of the physical re-

sources of the carriers and for the control of the flow of transportation traffic. Consolidation of railroad systems, and of terminals and terminal facilities, joint use of cars, locomotives, and shops, control over the routing of freight, in times of emergency, congestion, or car shortage, and the establishment of priorities in shipment, are some of the means suggested for the attainment of this end. They proved very effective during the Federal Control period, under the extraordinary conditions of the Great War and in face of an unprecedented traffic burden. These expedients have received detailed consideration in earlier pages. They are the methods of formal unification and of free coöperation.

The provision of adequate facilities, through legal order, on the other hand, creates a new and difficult problem. The obligations of the carriers in this regard are unquestioned. They spring from the public character of the transportation function. It is as clearly the duty of the railroad corporations, to which this function is delegated, to provide adequate equipment and facilities, as it is the duty of the state to construct and maintain public highways. This fact served as the basis of the recommendation of the Interstate Commerce Commission that it be vested with power "to require adequate service." In large measure the service may be rendered adequate through the process of unification and coöperation. The availability of "all unexpended balances of carrying capacity," irrespective of ownership or control, would doubtless make our transportation system reasonably responsive to normal traffic demands. But the authority to require adequate service would also empower the regulatory tribunal to order the outlay of capital expenditures for improvements and extensions—for the enlargement of terminals, for example, or for the construction of new lines. If such authority were exercised with due restraint—in response to a clear public need and with full knowledge and appreciation of the financial status and operating circumstances of the particular carrier involved—there

would be little danger of unreasonable interference with the prerogatives of management.

And, finally, effective regulation necessitates the adoption and enforcement of service standards. "Service" is in many respects a shifting, intangible, and highly complex concept, and practically every policy and activity of the regulating authorities exerts an influence upon its quality or adequacy. Service standards cannot be established independently of the level of charges or of the rate of financial return, and the impairment of railroad credit, whether as a result of loose capitalization and faulty administration of income, or of an unduly restrictive public policy in the matter of railroad earnings, renders their enforcement impossible. In like manner, the morale of railroad labor is a dominant factor in the determination of the quantity and quality, as well as the continuity, of the service. In the last analysis the character of the service is dependent upon the intelligence, loyalty, and sense of public responsibility with which the large mass of railway employees perform their transportation tasks. On the assumption, however, that satisfactory adjustments can be formulated with regard to financial and labor relationships, service standards must be established by which transport performance may be tested, and toward the attainment of which regulatory effort may be directed. These standards cannot be defined with dogmatic rigidity. They are many in number and constantly changing in character. But past experience discloses certain fundamental minima that involve little, if any, encroachment upon the characteristic tasks of management, and are clearly calculated to promote the common good.

Assuming that railway plant and facilities, in the aggregate, are sufficiently extensive, when properly coördinated and reasonably unified, to carry the normal transportation burden, these service standards are largely concerned with the elimination of unjustifiable preferences and the prevention of unsafe and inefficient practices. A few instances, by way of illustration, will lend concreteness to the problems involved. Shippers

must be provided with adequate facilities, but particular consignors or consignees must not be made the recipients of special privileges at the expense of less favored shippers or the general public. The opportunities for such preference are many—in the allocation of cars, in the dispensation of "free services," in the enforcement of demurrage rules, and in countless other ways. Injury to persons and damage to goods must be reduced to a minimum, and when loss or destruction occurs, the resulting claims must be settled promptly and equitably. The achievement of this end first demands safety of operation. The maintenance of conditions of safety is of such fundamental importance from the human as well as the industrial standpoint, that in their attainment can be found ample justification for vesting authority in the regulatory body to test, and if necessary, condemn, unsafe equipment; to investigate, approve, and order the use of such safety appliances as are deemed necessary, and which the carriers may reasonably be compelled to provide; and to prescribe such uniform rules of operating practice as will help to eliminate the chance of human error. Such regulations as to safety may infringe, in some measure, upon the field of management. The goal toward which they are directed, however, constitutes sufficient warrant for their adoption and enforcement. If formulated and applied with judgment and discretion, the public gain resulting from them would offset immeasurably any loss of initiative involved. But in the settlement of claims for loss or injury, pernicious preferences have also emerged. Fictitious claims for damage have been recognized, and excessive claims have been paid. The machinery of the claim department is thus utilized as a means of granting and receiving "smokeless rebates." While more properly related to the problem of personal rate discrimination, these practices, in the first instance, grow out of the character of the service rendered, with special reference to the broad question of safety of operation. And by way of final illustration, involving the removal of inefficiency in service practice, is the need of revising the relation-

ship between the shippers of freight and the carriers which serve them. The powers exercised by the shippers themselves over the distribution of special privileges must be curtailed in the public interest; for many of the rights of shippers—prescriptive "rights," so to speak, which are a heritage of the old days of over-strenuous competition—present difficult obstacles to the provision of satisfactory transportation service. The situation created by the dominance of private car lines has been fruitful of discriminatory exploitation. The privilege of reconsignment has seen notable abuses. The practice of free routing has inhibited improvement in the organization of the traffic. Locomotive and car performance has suffered because of established regulations as to carload minima and packing and loading practice. Many of the prevailing privileges were "extorted" from the carriers through strategic pressure in the old competitive situation; and the roads now find themselves unable, in many cases, to introduce and enforce a policy of retrenchment. Privileges easily granted cannot be withdrawn without difficulty. Public interference, under these circumstances, would increase rather than decrease operating efficiency. It is apparent, also, that the regulation of service standards can be developed, for the most part, along the beaten path of traditional effort.

But in the regulation of railroad service as thus conceived—whether it be directed to the achievement of full and flexible utilization of existing plant and equipment, or to the provision of adequate facilities, or to the recognition and enforcement of service standards—the dominant authority must be vested in the Federal Government. The history of the regulative activity of the states, traced briefly in preceding pages, provides convincing evidence of this need. Unification of railway plant and equipment, coöperative use of transportation facilities, and centralized control of the flow of traffic under emergency conditions cannot, in the very nature of the case, be accomplished without national supervision. The mandatory enforcement of service requirements by way of physical facilities in-

volves authority so closely related to that essential to the establishment of general "pooling" arrangements, and its effective exercise is so largely dependent upon financial adjustments necessarily national in scope, that in this respect also prime reliance must be placed upon federal activity. And if service standards are to be molded reasonably, without undue interference with operating technique, and applied equitably, without unjust discriminations, intentional or otherwise, uniformity in regulation is indispensable. Such uniformity is practically impossible when jurisdiction is distributed among the legislatures of forty-eight different states. The experience of the past justifies the conclusion that "regulation by some states makes it difficult and in some cases impossible for carriers to furnish equitable and adequate service." [2] The delimitation of power between the nation and the states on a purely territorial basis possesses no sound economic warrant when it is detrimental to functional effectiveness. Nor need any insurmountable legal difficulties to centralization be encountered. Congress is endowed with exclusive and plenary power to regulate interstate commerce; and since it may lawfully set up and enforce whatever standards and regulations are deemed reasonably necessary to further, and prevent the subversion of, the course of interstate commerce, it may properly regulate the transportation service incident even to intrastate traffic, in so far as the voluntary practices of the carriers or the compulsory adjustments of the state authorities impose a burden, through discrimination or otherwise, upon interstate trade. The Federal Government would seem to be clothed with power to exercise such authority, even without the creation of large, regional, interstate railroad systems, or the adoption of the device of federal incorporation, both of which have been proposed as means of strengthening federal jurisdiction over the transportation service.

Finally, service regulation must be chiefly effected through

[2] C. O. Ruggles, "Railway Service and Regulation," *Quarterly Journal of Economics*, Nov., 1918, Vol. XXXIII, p. 165.

the process of administrative control. There is a clear trend in this direction, in both state and federal policy, and this trend is deserving of complete recognition. Direct legislative enactment, in the establishment of service standards, as in the prescription of maximum rates, is generally a manifestation of temporary discontent, rather than an attempt at permanent adjustment. Public action, under these circumstances, is both spasmodic and rigid. Legislative regulation is incapable of providing either flexibility or continuity in the settlement of the complex relationships, in matters of service, between the carrier, the shipper, and the public. It generally functions through the formulation of minute rules and concrete practices —which involve undue encroachment upon the details of internal management, and find justification, for the most part, only in the unquestioned requirements of safety of operation. The history of service regulation by the states has clearly demonstrated the ineffectiveness of direct legislative action, and the alternative possibilities of administrative supervision. In large measure Congress must confine itself to the enunciation of general principles for the regulation of railroad service, vesting in the Interstate Commerce Commission such grants of mandatory power, broad in scope and clear in purpose, as will enable it to develop and enforce reasonable and progressive standards of transportation performance.

CHAPTER VIII

RATES, CREDIT, AND FINANCIAL RETURN

Income and risk, as well as control, constitute essential incidents of ownership. Under a system of private management, therefore, government regulation of financial adjustments is indispensable, both for the protection of the carriers, in order that capital investment may be safeguarded and stimulated, and for the protection of the public, in order that monopoly abuse may be prevented and an adequate transportation service developed. The level of railway charges determines the extent and stability of revenue from transportation, and hence the question of rates has generally been regarded as the heart of the railroad problem. But the public importance of rate adjustments springs not merely from their influence upon the maintenance of the integrity of railroad capital, the development of transportation credit, and the prevention of excessive earnings. The character of the rate structure itself—the relationship of rates to one another, independently of their aggregate effect upon operating income—possesses far-reaching social and economic significance. Maladjustments as between different localities and classes of traffic—rate discriminations that have frequently emerged in the history of railroad transportation in the United States—may mold artificially, and in distinct contravention of the public good, the character and direction of industrial enterprise. The regulation of rates, therefore, with reference to their relativity as well as their absolute level, has furnished the chief content of the mass of legislative acts, commission orders, and judicial decisions which constitute the outward record of the efforts of the State to safeguard and advance the public interest under private rail-

road ownership and administration. While rate adjustments and financial arrangements have been over-emphasized in the past, to the costly neglect of the adequacy of the transportation service and the status of labor relationships, the problem of rates, credit, and financial return must necessarily retain a central, if not a dominating, position in the regulatory scheme. It is the purpose of this chapter to consider the primary financial demands of reconstructive policy.

§1. *The Necessity of Rate Regulation*

The necessity for public regulation of railway rates arises directly out of the nature of the transportation industry. We have already noted the special economic environment that surrounds railroad competition and determines its outcome—the fact that the service is furnished so largely at joint cost, that the expenditures incurred in its provision are dominantly constant, that it functions under the influence of increasing returns, that the struggle for traffic is always keen and often unreasoning, that the methods of the struggle tend to be ruinous and continued conflict self-destructive, that coöperative action and unification of purpose become inevitable. These considerations differentiate the railway business from ordinary private enterprise and render it the leading type of natural monopoly. Price regulation is peculiarly a problem of monopoly. It is especially in those fields where competition fails to operate as an effective determinant of reasonable charges that the regulation of price becomes a necessary function of government. Resort to price-fixing under conditions unconnected with monopoly, as in our recent war experience, is but a reflection of emergency pressure. In the normal conduct of industrial enterprise, the existence of free competition may generally be relied upon as an automatic safeguard of the public against inequitable charges, while the dominance of monopoly conditions necessitates conscious public control to insure reasonable prices.

But the mere fact of monopoly does not constitute the sole warrant of railroad rate regulation. The peculiar nature of railway competition and the supreme importance of the transportation function both intensify the need of regulation and complicate the problem of its exercise. The rate structure and the bases of rate-making that underlie it are essentially unlike those of most private industries, whether competitive or monopolistic. In the degree of its complexity and in the opportunistic nature of its "principles," as in the tremendous rôle it plays in molding the character and direction of industrial development, the railway rate system differs from all other systems of prices. The problem of railroad rate regulation possesses a significance and involves a difficulty not inherently to be found in the governmental policy of price-fixing ordinarily arising in monopolistic situations.

Transportation is a foundational industry. It forms the connecting link between the various stages and processes of productive undertakings. It performs an indispensable service for the basic agricultural and extractive industries, provides foodstuffs and raw materials in support of manufacturing enterprise, and brings the finished product to the marts of trade. Ready access to distant sources of supplies and the progressive extension of commercial markets are alike dependent upon cheap and easy transportation, and without the aid of a highly developed mechanism of transport the localization of industry would be rendered impossible. All of the salient characteristics of the modern capitalistic system of production —the minute sub-division of tasks, the machine process, large-scale enterprise, standardization of product, and the like—are organically interwoven with the transportation function. Since the railroad of to-day constitutes the chief instrument of transport, its rate adjustments inevitably exert a determining influence upon the status of the entire field of industrial activity. Excessive rates hamper, as low charges stimulate, the forces of economic efficiency and commercial expansion. Maladjustments in rates lead to anti-social accumulations of wealth

and to the artificial development of particular industries and favored localities. Hence government control of railway rates is vital to the common welfare. They must be regulated because of their incalculable significance to the whole industrial scheme. Public regulation of rates, if the best interests of society are to be served, must result in a system of "reasonable" charges, producing an adequate return on railroad investment, and properly adjusted to one another, to the demands of the current economic situation, and to the prevailing social and political ideals.

But what are "reasonable" rates? The characteristics of the railway business and the nature of railway competition, as has already been suggested, are such as to render the basic principles of rate-making by no means easy of definition. This fact constitutes both an obstacle to successful regulation and an added reason for its necessity. The natural criterion of fair price, for specific services and commodities as well as for the total output, is cost of production (including, of course, a reasonable return on capital). But in the field of railway transportation the doctrine of "cost of service" is neither strictly and generally applicable in practice nor entirely desirable in principle. Without entering upon a detailed analysis, the nature of the difficulties may be briefly indicated. Since railroads, as we have seen, are operated very largely at joint cost—from one-half to three-fourths of their total expenditures being impossible of allocation to any specific service—it becomes clearly impracticable to determine the actual cost of the transport of any one of the thousands of items of freight carried, or of the various items of passenger service rendered. The ingenious expedients of cost accounting, in spite of many real advances, have failed—and in the nature of the case, probably must fail—to produce accurate and reliable measures of these specific costs. The data are unavailable for rearing a railway rate structure on the cost basis. But it is not clear that such an adjustment would be desirable, even if practicable. The raw materials of industry and the staple neces-

sities of life—coal, iron, steel, lumber, oil, wheat, corn, and the like—are far heavier and bulkier in proportion to their value than the silk and lace, the jewelry, ornaments, and pleasure cars, and the host of other expensive manufactured products, the demand for which is stimulated largely by the desire for emulation, and which are far less essential to the general welfare. Railway rates based on cost would result in much higher transportation charges for cheap and bulky articles than for compact and valuable commodities. The strict application of the cost of service principle, therefore, would tend to restrict the traffic in the most important products of commerce and industry—for which, under existing conditions, especially low "commodity rates" are generally available—to a bare minimum. Such an eventuality would destroy our elaborate industrial organization, with its concentration of production, territorial division of labor, and free development of extensive markets, all of which owe their existence, in large measure, to the cheap transport of raw materials and foodstuffs.

These considerations render *cost of service* clearly inapplicable as a sole determinant of rate reasonableness. Where one service obviously requires a greater expenditure than another —whether because of the nature of the commodity or the distance for which it is carried—a presumption is established in favor of a higher rate. But the usefulness of the cost principle is largely limited to this comparative purpose. In the past, therefore, regulating authorities as well as traffic managers have relied in the main on the principle that rates should conform to the *"value of service,"* modified in varying degrees by such cost data as are ascertainable. Since the "value of service" is measured, essentially, by the amount that shippers as a class are found upon experiment to be willing to pay, this principle provides a rather indefinite basis of rate-making. In practice, accordingly, the relative values of the commodities transported are generally accepted as a concrete expression of the relative values of the services rendered. The shipper of a carload of shoes, for example, will be likely to place a higher

estimate on the value of their transport than would the shipper of a carload of coal upon the service he receives. The transportation cost in the case of the shoes will constitute but a small proportion of their value, whereas in the case of the coal, were rates adjusted on the same basis, the cost of transportation would be as great perhaps, or even greater, than the value of the commodity carried. An increase in rates on shoes, therefore, will have but a small effect on the quantity shipped; but an equally high rate on coal might reduce that traffic to negligible limits. In like manner, an increase in rates at local non-competing points may exert a relatively insignificant influence upon the amount of traffic offered for transportation; whereas an equal increase at competing junction points might entirely deprive a given carrier of such traffic as may resort to an alternative, though often more circuitous, route or line. From this fact arises the general American practice of disregarding distance, in large measure, in the adjustment of freight tariffs, just as the necessity for the classification of freight is based upon differences in the nature of commodities and the character of the demand for them. At the basis of the "value of service" principle, then, is the question of the volume of traffic that will result from a given rate. If the rate exceeds the value of the service, tonnage will tend to decrease, and the traffic manager will have his warning in experience; if the rate can be increased without a marked decline in tonnage, pragmatic evidence is available that the charge is still below the danger point with reference to the flow of revenue. Rate adjustments, in this manner, are primarily influenced, not by the expenses incurred in rendering a particular service, but by the revenues that may be derived from it in support of the total transportation task.

From the point of view of the railroads, therefore, and even, in large measure, from the standpoint of public control, the whole problem of the relativity of rates becomes a question of "charging what the traffic will bear." Rate adjustments become in the largest degree a matter of experimentation—oppor-

tunistic concession to the needs of the traffic in sight. Only in this way, by placing the financial burden upon those commodities and localities where it will not be felt excessively, rather than where, in strict logic, it might be conceded to belong, can the transportation service be maintained for all traffic, and railway plant and facilities be most fully utilized. But "charging what the traffic will bear" is a process of twofold significance. In so far as its use is limited to such a distribution of charges between different classes of traffic and different points of origin and destination as to permit the best utilization of transport capacity, it constitutes an essential and economically justifiable basis of rate-making. But it may also be made the instrument of monopoly power for the realization of monopoly profits. Under the conditions of virtual monopoly that tend to prevail in the railroad industry, transportation charges, in the absence of regulation, would soon come to be assessed at the maximum amount the traffic would bear, not without restricting the tonnage of particular commodities or special localities unduly, but without depriving the carriers of the highest net return on the business as a whole. Rates would be forced upward until the decrease in traffic becomes so great that the small tonnage remaining at the high rate produces less revenue than the larger volume that would be forthcoming at slightly lower rates. No public justification can be made to support this practice. In this sense of the term, "charging what the traffic will bear" is merely the process of monopolistic exploitation—dictated, not by the desire to utilize railway facilities to the fullest extent, but by the ability to extort the maximum tribute of private profit, without regard to public advantage.

Out of these two processes of "charging what the traffic will bear" arises the dual problem of rate regulation. That the exaction of monopoly profits in a quasi-public industry, upon which the entire people is dependent for the most vital of services, must be prevented by governmental authority, is clear and unquestioned. This is the primary aim of public regula-

tion. While the elimination of extortionate rates is the instrumentality through which excessive monopoly earnings may best be attacked, such restriction is not directed to the regulation of rates for their own sake. Rates in the aggregate are only a means to an end—they are sources of revenue and profit. The establishment of a reasonable rate level, therefore, is essentially an expedient for the regulation of profits. It involves, as will appear later, such questions as these: What constitutes a fair rate of return? How shall the fair value of the property on which it is earned be determined? What disposition shall be made of such excess profits as may emerge in spite of public control of the sources of revenue? These are not strictly rate problems. They are relatively independent of the character of the rate structure.

Even if we assume, however, that the rate of return for the railroads as a whole is entirely reasonable, the application of the principle of "charging what the traffic will bear" may yet lead to serious abuse. This will arise from maladjustments in the rate structure. In the absence of regulation, particular industries or localities may be subjected to unjust discrimination—to the detriment of the public welfare—even if the general level of rates is reasonable. Changes in the volume of traffic offered (the criterion of what the traffic will bear) are by no means as responsive to every variation in the adjustment of charges as is frequently assumed. In most cases neither the shipper nor the consignee of goods really pays the costs of transport; these costs are generally shifted to the consumer through the medium of higher prices. In many instances, also, the transportation charge constitutes so small a proportion of the price to the consumer that its influence upon demand is negligible. And the demand for the cheaper necessities is so inelastic as to remain relatively stable and continuous without regard to rate adjustments. In like manner, the practice of disregarding distance in the adjustment of freight tariffs may be so extended as to embrace traffic in no sense naturally tributary to a particular transportation system—bringing private

profit, perhaps, to the carrier, but involving unnecessary economic waste for the community, because of unreasonably circuitous routing. While the "value of service" principle, therefore, as manifested in the process of "charging what the traffic will bear," constitutes a sound starting point in the development of the rate structure, it may easily be carried so far as to result in the imposition of charges that can find no justification in the general need or in enlightened public policy. Essential differences between commodities provide a proper basis for the classification of freight, and the competition of markets, as well as of transportation agencies, justify the disregard of distance in many instances. But these adjustments must be developed in reasonable response to the public interest; and there are no automatic safeguards against abuse. From these circumstances arises the problem of rate regulation proper: the equitable adjustment of the relativity of rates, without undue discrimination against particular classes of traffic or communities, and in conformity with accepted social and economic ends. To this problem the following section is devoted. The question of profits, on the other hand, involving the regulation of the general level of rates, will be postponed for subsequent consideration.

§2. *The Relativity of Rates*

The problem of regulating the relativity of rates is, at bottom, only a matter of preventing unjust and unreasonable rate discrimination. Such rate discrimination may manifest itself in many ways. Until comparatively recent years it found its most obnoxious form in personal favoritism, reflected through a great variety of expedients, whereby lower rates were charged to some shippers than to others—to the great advantage of the few and the equal prejudice of the many. It has been the continuing effort of both state and federal regulation to eliminate these practices, and considerable success has been attained in this direction. But unjust preferences as to railway rates may

arise independently of the practice of lowering the published tariffs for favored individuals or corporations. The existence of local and commodity discrimination depends, not on departures from the published rates, but on maladjustments in the schedules themselves. It is this fact that raises the problem of the relativity of rates. It is the purpose of regulation, as far as is practicable, to eliminate these maladjustments, whether they are consciously intended for the benefit of special producers, special industries, or special localities, or prevail merely as the result of accident or inadvertence; and to develop a rate structure through which the burden of charges may be reasonably assessed against each class of commodities and type of service.

It is both natural and necessary that regulatory commissions should attempt to formulate definite principles for their guidance in determining the reasonableness of rate relationships. But the difficulties involved can scarcely be overstated. We have noted that neither of the two outstanding principles of rate-making—cost of service and value of service—provide a precise or desirable basis for the adjustment of the rate structure. In the past, therefore, it may be said that railway charges have been largely molded by estimates or assumptions, varying in accuracy and definiteness, as to the value of the service, increasingly modified, in recent years, by such cost data as were available and relevant. Even such a generalization, however, tends to obscure the arbitrary and accidental character of the great bulk of rate relationships. The rate structure is a growth, rather than a creation; and this growth has been influenced and modified by innumerable diverse and extraneous circumstances and conditions.

The competitive influence has been fundamentally operative. In the earlier days almost the sole criterion of a proper rate, from the standpoint of the railroads, was its effect on the competitive situation. Important industrial and trading centers were generally located along rivers or on the seaboard, where water transport was available, and the level of railway rates to

and from such points has always been more favorable than at the smaller interior centers where competition by water was lacking. In the course of time competition by railroad largely displaced water competition. But railroad competition likewise tended to become centralized in the larger cities, at the important seaports, and at a few interior points that had assumed importance in spite of the adverse rate situation, because of special industrial advantages. In this manner rates on competitive traffic, whether the competition was created by other railroads or by water carriers, have always been lower than on non-competitive traffic.

As a result of these adjustments the growth and concentration of industrial activity in the large cities have been effectively stimulated. These facts explain also such phenomena as the "basing point system," whereby rates to important industrial communities, or basing points, especially in the south, are so fixed as to meet competitive conditions, while rates to less important surrounding localities consist of the charge from the point of origin of the traffic to the basing point, plus the local rate from the basing point to the smaller town, regardless of relative distances or locations. The creation of rate blankets, or the practice of establishing group rates, was likewise a result of competitive forces. The interest of the roads in these adjustments arose chiefly from their desire to stimulate traffic. Their purpose was to equalize the competitive advantages of producers located at different points, at least in so far as these advantages arose out of proximity to the demand, and thereby enable all of these producers to compete in common markets, develop their industries, and increase their traffic. To this end rates to the chief markets have been equalized, regardless of distance, from all points situated in broad belts containing the principal producing centers. The yellow pine belt, the California fruit belt, and the coal blankets in Ohio and West Virginia are examples. Very similar adjustments have arisen in connection with the competition in common markets of producers located in widely separated parts of the country. Rates

on fruit from California, for example, have been equalized with rates from Florida to the common markets in the middle west, regardless of distance. Through such means market competition, as distinct from the competition of transportation agencies or alternative routes, has influenced the development of the rate structure. But even where definite and comprehensible interests like these are not in evidence, mere accident and caprice have produced the widest variations in charges and an almost inconceivable lack of uniformity. Hundreds of railroad corporations have played an independent part in the development of the rate schedules, and in the absence of definite principles to guide them, the result has been chaotic and in no small measure the product of chance.[1]

But the task of rationalizing the rate structure and rendering it more uniform is one of almost insurmountable difficulty. Existing rate adjustments, however unscientific or unfair they may be, tend very strongly to perpetuate themselves; for these adjustments have served as one of the principal factors in molding past industrial development. Although industries and communities have been in many instances artificially encouraged by unduly favorable railway rates, the precipitate removal of these advantages might lead to serious industrial disorganization. A radical revision of the structure of rates would inevitably result in the dislocation of long-developed channels of trade, the substantial weakening or destruction of specific enterprises and business centers, and the necessity for sharp realignment of producers and markets. The remedy, under such circumstances, might prove more harmful than the disease. However unacceptable, in theory as well as practice,

[1] In the words of the Interstate Commerce Commission: "The railroad rates of this country have not been constructed as a rule upon any scientific basis, and this is especially true of interstate rates. The traffic officials who have established these rates have generally done so without any special inquiry as to the total amount of revenue which ought to be produced, or as to the part of that burden which a particular commodity ought to bear." The 1910 Advance Rate Cases: Eastern Case (20 I. C. C. 248).

the existing rate system may be, steps toward its improvement must be taken gradually and with caution.

The proposal recently advocated by Commissioner Robert W. Woolley of the Interstate Commerce Commission, as a means of simplifying and rendering more uniform the method of fixing freight charges, provides an excellent illustration of the dangers of sweeping reform in rate adjustments, in the light of the historical character of the rate structure.[2] Briefly stated, the suggested plan involves the acceptance of distance—as measured in car-mile units—as a sufficiently exact reflection of the cost of the freight service, and the construction of rate schedules on the basis of such cost, the terminal and the line-haul elements of the charge being separated. Each rate would thus be constructed by adding the terminal costs at the points of origin and destination to a line-haul charge based on a specified amount per carload per mile.

A straight distance tariff of this character, applicable to all commodities and under all transportation conditions, would doubtless introduce uniformity and definiteness into the rate structure. The assumption, however, that this uniformity would spring from the adjustment of charges on the basis of cost, distance alone being the criterion of cost, is a daring one. The only actual costs proposed for consideration under this plan would be the out-of-pocket costs of terminal operation. The fixed charges and constant operating expenditures that are not logically susceptible to specific allocation would have to be spread over the traffic through an increase of the line-haul charge. The costs of hauling the traffic over the open line would be assumed to be proportional, regardless of the commodity, to the car miles. Altogether this would amount to an allocation of expense almost as arbitrary as any now in use. It is highly improbable that even out-of-pocket costs—excluding terminal and special service costs—are proportional to distance. Convincing evidence is certainly lacking that total car-

[2] See Senate Hearings, p. 382, *et seq.*; also "How Freight Rates Should Be Made," *Annals*, November, 1919, pp. 156-169.

mile costs are proportional to distance, regardless of the class of traffic or the conditions of operation.

The chief objections to the proposal, however, spring from its probable practical effects, rather than from its theoretic weakness. If a uniform car mileage rate were applied to all commodities, regardless of their value, there would follow a radical reduction in the shipment of low grade freight, with consequences which we have already noted in earlier pages. If a classification of some sort were used, varying the mileage rate with varying types of commodities, this objection might be restricted in force. It is very unlikely, however, that the large scope of transportation charges now in effect—especially through the use of commodity tariffs—even in so far as they are essential to the best utilization of railroad plant and equipment, would be found compatible with the proposed rate basis.[8]

But these new rate adjustments would tend to exert an even more far-reaching influence through the virtual imposition of a prohibitive tax upon long haul freight. The economic disturbance resulting from such a policy would be keenly felt, whatever social boon might ultimately be attainable through its instrumentality. Producers and consumers would be driven more closely together, and the existing system of concentrated production and extensive markets would be seriously undermined. The method of radical transformation would tend to displace the process of evolutionary development. The established channels of commerce and industry would be subjected

[8] *Cf.* the following from Commissioner Woolley's paper in the *Annals*, November, 1919, p. 166: "Apart from these ratings (the freight classifications), however, there are hundreds of exceptions, commodity rates and special commodity rates, which were established under pressure of both transportation and commercial competition, and with little reference to transportation costs. Here again the railroads, whether intentionally or not, are indirectly engaged in creating artificial commercial advantages in the form of freight rates and in like form imposing unjust burdens and inequalities. These are the very evils that legislation providing for rate regulation intended to eliminate, but I venture the suggestion that they never will be eliminated until we have established a uniform rate structure universally applicable."

to a degree of change and interference unmerited by the individuals, industries, and communities that had been relying upon the traditional rate structure, and would be unjustified by the benefits likely to emerge from the more uniform and systematic adjustment of freight charges.

Improvement in rate relationships must come gradually, through piece-meal modification of the existing structure, rather than through the sweeping application of a so-called scientific mechanism. The fact must be recognized that the problem of regulating the relativity of rates is primarily one of eliminating undesirable discrimination rather than of discovering some single principle of rate-making that would universally commend itself on purely logical grounds. The task of molding the rate structure satisfactorily will then be regarded as an evolutionary process of correcting maladjustments, and not as a search for some revolutionary standard automatically capable of promoting the public good. Vested interests, however suspicious their origin, demand some degree of recognition; complete reversal of established policy places future development, as well as past achievement, in jeopardy.

What is fundamentally essential in the existing situation is a greater socialization of railway rates—a clearer definition and a more conscious realization of social ends, and the gradual modification of rate adjustments toward the attainment of these ends.[4] The transportation function, through the medium

[4] The following dicta from the opinion of Commissioner Franklin K. Lane in the 1911 California fruit case (*22* I. C. C. 157-158) are very suggestive: "Perhaps the United States will one day declare a policy of its own in this regard. Primarily it is a matter of national concern and not of railroad policy as to what system of rate making shall obtain, so long as the carriers receive a reasonable return upon the value of their property. The people may say (1) that railroad rates shall be made so as to carry all products into all markets within the four lines of the country; or (2) that, after a certain narrow limit is passed, the whole of the land shall be one zone; or (3) a system of rates that will keep producers and consumers as near together as possible, and eliminate waste in transportation. These are national questions. They go to the very future of our industrial life. Upon their determination depends the character of the farm products and the nature of the industries in the various sections of the country. The railroad by its

of rate relationships, can be made to exert a determining influence upon many of our basic social and economic arrangements. The more uniform distribution of population, the checking of unwieldy industrial concentration and urban congestion, the shortening of distances between producers and markets, the development of rural communities and new commercial centers, the public control of the extent and character of import and export trade, the building up of nationally desirable economic enterprises—these and a great number of similar purposes might, if accepted as socially desirable, be effectively furthered through deliberate, though gradual, rearrangement of rate relationships. Neither distance, nor cost, nor value of service, nor any single abstract rule, can serve as the sole criterion of the reasonable specific rate. Charges should be deemed reasonable which promote the interests of society as a whole: they should presumably compensate the railroad for at least the out-of-pocket cost of carriage; they should be sufficiently low in specific instances to permit the flow of socially desirable traffic; they should not accentuate competitive disadvantages, and they should equalize them only in so far as the general good would thereby be furthered; they should not impose undue hardship on special sets of producers or on particular communities; they should be adjusted to the demands of the dominant social and economic ideals of the time. The primary concern of the carriers in the rate question is centered in the total flow of revenue, so that their private investment

rates may make each portion of the country largely independent of the remainder, or it may make of the Nation one economic and industrial unit, each portion thereof doing best what nature has fitted it to do best. This is fundamentally the difference in the philosophy which underlies the two methods of making rates which have been given consideration in this case. Without any expression of policy from Congress, we accept the policy which the railroads themselves have made, considering that upon the whole the results arising from such policy do not conflict with the provisions of the law. There is no doubt in my mind but that the Commission could not itself prescribe a blanket similar to that obtaining here, and which we are approving because neither the carriers nor the shippers wish it destroyed."

may be conserved, and their credit status maintained; the adjustment of the relativity of rates is altogether a public function. But the satisfactory adjustment of rate relationships must always remain a matter of policy—to be achieved, not through the automatic instrumentality of an arbitrary yardstick, but through the findings of sound judgment, in the light of an articulate goal.

But the public task in the regulation of railway rates—whether on the old basis or with more conscious prosecution of social ends—cannot be adequately accomplished without removal of the conflict between state and federal authority. The plea of railroad officials that they cannot serve and obey forty-nine masters has been loudly and repeatedly uttered, and it is not without justification. The lack of uniformity between state and federal action, and in many instances the actual conflict between their policies and requirements, have operated in the past as among the most potent obstacles to progressive regulation. The practical difficulties involved in the delimitation of jurisdiction between the state and federal governments have made themselves felt in all aspects of railroad regulation, but in no other matter has the "conflict of authority" been joined so strenuously or with such demoralizing effects as in the problem of rate relationships. Effective public control of transportation charges is virtually impossible without some solution of this difficulty.

The problem arises out of the very nature of our dual form of government. The states are sovereign in all matters not expressly delegated to federal authority by the constitution. Since the powers of Congress, and therefore of all agencies acting under the jurisdiction of the national legislature, are restricted to the regulation of commerce between the states and with foreign nations, the authority of the state legislatures to regulate intrastate railway rates is unquestioned. But the general development of our transportation system into interstate lines, and the common flow of railroad traffic inde-

pendently of political boundaries, have made it apparent that the rate problem must be treated, very largely, in its entirety. Railway rates, like other systems of prices, form a whole no part of which can be disturbed without upsetting the entire system. The action of the states in fixing purely intrastate rates, therefore, has come to possess great national significance and to produce effects by no means confined within the bounds of their own political units. It is beyond our present purpose to describe the concrete ways in which state-made rates have invalidated federal policy, or to trace the historical steps of the legislative and judicial process whereby a progressive restriction of state authority has been achieved. Both of these matters have received consideration in an earlier chapter.[6] The essential issues appear clearly. If the obstacles to effective rate regulation are to be cleared away, two questions must be answered: How far should rate regulation be an exclusively national function? In what manner can the nationalization of rate control to the extent deemed necessary best be accomplished?

Because it is generally acknowledged that the states have frequently exercised their powers over the rate structure in unintelligent and unduly restrictive fashion, the cry is loud, and especially loud from the carriers themselves, for the total abrogation of state authority over railroad transportation—for the restriction of the powers of the state commissions to municipal utilities only. The most valid ground for this attitude is to be found in the activities of a few of the local commissions, notably that of Texas, which have deemed it their duty to "protect" home shippers by forcing upon the roads rate adjustments calculated to give the producers within their

[6] See Chapter II, *supra*. Also *cf.* Robert Mather, "How the States Make Interstate Rates," *Annals*, 1908, reprinted in W. Z. Ripley, *Railway Problems*, revised edition, p. 530; the author's *Railway Regulation*, chapter IX, "The Conflict Between State and Federal Authority"; and W. C. Coleman, "The Evolution of Federal Regulation of Intrastate Rates: The Shreveport Rate Cases," *Harvard Law Review*, Vol. XXVIII, November, 1914.

state boundaries distinct advantages over the producers in contiguous states and in competition with interstate commerce. While nearly all state-made rates inevitably affect the character of the general rate structure, this deliberate prosecution of the policy of creating discriminations is particularly disastrous, and it is admittedly essential that some action be taken to render federal authority supreme in all such instances.

It does not follow, however, that the state commissions must be entirely eliminated or completely shorn of power in the field of railroad regulation. Because of their intimate contact with local conditions, the state commissions fill a place in the system of regulatory machinery that no federal agency can adequately assume. In the narrower field of rate regulation, more convincing justification can be advanced for exclusive federal jurisdiction. But even in this field there is sound reason for the exercise, in the first instance, of state authority. The regulation of intrastate rates by the state commissions is not in itself undesirable; it becomes so only when the charges prescribed are of such character as to interfere with the regulatory activities of the Federal Government. Such interference does not arise when the state-made rates are applied to traffic which does not compete directly or indirectly with interstate carriage, nor is it felt substantially even when local and through hauls do affect each other, if the state rates are not fixed on the discriminatory principle, in striking disproportion to interstate charges. Some scope is left, therefore, for legitimate and—at the worst—innocuous local control. Moreover, because of the constitutional sovereignty of the states, there are serious legal obstacles to the complete nationalization of the rate-making function. Compulsory federal incorporation of all railroad systems appears to be the only means of centralizing authority over intrastate rates in the national government, and even this method is believed by many to be of doubtful constitutionality, unless it be accomplished with the consent of the carriers. The issue is whether the Government can, without violation of constitutional guarantees, confiscate

railroad property held for public use from the private companies as now organized in order to turn it over to federally incorporated private companies for an identical use.

Fortunately, the trend of judicial decision, particularly as reflected in the judgment of the United States Supreme Court in the Shreveport case, opens the way to a workable compromise.[6] In that case the power of the Interstate Commerce Commission to change state-made intrastate rates which were shown to burden interstate commerce came into question; and under the power of the Interstate Commerce Commission to prevent local discrimination the court upheld the supremacy of federal authority. The present need is largely for a clear legislative enunciation and a uniform administrative and judicial application of "the Shreveport principle." If it were generally recognized that state-made charges are subject to review by federal authority, for the purpose of determining whether they operate to the disadvantage of interstate commerce, the policy of establishing intentionally discriminatory rates would be discouraged; and the attitude of state legislatures and commissions, if practical machinery of coöperation were also created, would tend to change from one of hostility to one of acquiescence in the rate-making principles and practical adjustments prescribed by the Interstate Commerce Commission. In the light of these circumstances, there was need, with the resumption of private management, of further enabling legislation, which would expressly clothe the Commission with power to review intrastate rates believed to be discriminatory with reference to interstate commerce, and to adjust these rates in conformity with the demands of the general rate structure. Under the influence of such a policy the control of railway charges would, in practice, become more and more nearly an exclusive federal function. With the increasing combination of railway lines, the growing length of transportation hauls, and the further integration of industrial proc-

[6] 118 U. S. 557; 230 U. S. 352; 234 U. S. 342.

esses, the various elements of the rate structure may be expected to become even more closely interdependent than at present, and the number of intrastate charges that do not affect interstate traffic to be constantly reduced. Through a gradual process of development, therefore, the complete nationalization of rate control may ultimately be realized.

In the meantime, however, the solution of the problem of conflicting jurisdiction could be measurably facilitated through the establishment of machinery of coöperation between the nation and the states. The regional commission plan affords the most promising proposal for this purpose. This plan contemplates dividing the country into a number of districts, each with a federal regulatory body subsidiary to the Interstate Commerce Commission, applying the principles and decisions of the central authority to the cases arising in its district, much after the manner of an inferior court. The essence of the idea lies in the creation of a limited number of local commissions in control of reasonably homogeneous regions, the boundaries of which would be determined, not by political lines, but by the natural channels of traffic movement. Such new agencies might be relied upon to relieve the Interstate Commerce Commission of a large part of its burden of detailed administrative activity, and to mold the regulative process, without sacrificing uniformity of action, in the direction of greater harmony with the local needs of particular sections of the country. A central commission cannot be in intimate contact with the transportation problems of a continent, these problems arising under the most diverse conditions. Regional commissions, on the other hand, would exercise jurisdiction over territories in each of which the general conditions of transportation would be reasonably similar, and could be composed of men directly familiar with the problems of their respective regions, and with the particular roads and shipping interests subject to the control of federal authority.

The present spirit of controversy existing between carriers, shippers, and consumers might thereby be lessened, and the

regional bodies might serve as a uniting link between the Interstate Commerce Commission and the state railroad commissions. In large measure the traditional difficulties of conflicting authority have sprung from the feeling of hostility or divergence of purpose that has prevailed between the federal and state agencies. No solution of the problem—short of actual elimination of the state commissions—is likely to prove entirely satisfactory, until a greater spirit of coöperation displaces this attitude; and the regional commissions would be in a strategic position to stimulate such coöperation. They would be close to the problems of the various states comprehended in their respective jurisdictions. In the investigation of important controversies joint hearings, in which both the state commissioners and the regional commissioners might participate, could readily be held. These intermediary bodies could interpret the views of the Interstate Commerce Commission to the state commissions, and *vice versa*. Through this means, therefore, one of the dominant factors responsible for the friction and confusion of the present situation might be eliminated. Express legislative definition of the power of the Interstate Commerce Commission over intrastate rates is unquestionably necessary, and in view of the Shreveport decision would doubtless be held constitutional. But such strengthening of federal authority might increase rather than diminish the arrogant independence of some of the state tribunals. The processes of railway regulation are in great need of coöperative spirit and unified practice among the controlling public agencies. The outstanding advantage of the regional commission plan consists in the likelihood that it would provide an effective means for achieving these desirable ends.[1]

[1] The exigencies of space do not permit a detailed discussion of the many matters of procedure that might improve the public regulation of rates. The pre-war procedure was slow and cumbersome, and came into touch with its problems at too late a stage in the process. There has been much adverse criticism with regard to both the initiation and the revision of railway charges. In the *initiation* of rates the attitude of shippers was largely disregarded. They were left to their remedy after the event. Two policies have been advocated by

§3. *Railroad Credit and the Regulation of Security Issues*

We have already noted that the tasks of rate regulation present a dual problem. The primary function of the original Interstate Commerce Commission was to prevent undesirable discriminations, and in this field public control has scored notable successes in the course of the past three decades. But the problem of determining the general rate level and of limiting railway profits still remains for consideration. This question the old scheme of regulation never recognized quite adequately nor faced quite frankly. To this problem, and to certain closely related matters bound up in the financial regulation of the carriers, we must now turn.

The evils of both an inadequate and an excessive rate level have been indicated in earlier pages. It is obvious that one of the fundamental purposes of regulating monopoly is to

way of change. The first is that the Government initiate rates—the interest of the carrier being limited to the general level of charges, and the question of relativity being primarily of public concern. In the absence of a government guaranty of earnings, and in view of the desirability of conserving private initiative, there seems to be no sound warrant for this policy. Government representation on the directorates of the carriers would constitute a sufficient advance in this direction, and would also strengthen the regulative process in other aspects of the railroad problem. The second suggestion contemplates the organization of local freight rate committees in important traffic centers composed of railway officials and representatives of the shipping interests, whose duty it would be to examine proposed changes of rates and test their desirability before presenting them to any commission and initiating the lengthy process of investigation, suspension, complaint, and review. This plan has much merit. Such rate committees would bring helpful coöperation between the carriers and the shippers, and would reduce subsequent controversy to a minimum. The public power of revision would constitute an ample safeguard against abuse of such general interests as are not represented by the shippers immediately involved. Rate *revision* has been faulty—aside from the questions of principle that have received detailed discussion in the preceding pages—because of the slowness of the process and its failure to reflect sufficiently the special needs of local conditions. It is believed that an increase in the personnel of the Interstate Commerce Commission, the extension of its bureau plan of organization, and the creation of regional commissions of the general type described above would contribute substantially toward the elimination of these defects.

secure for the public such reasonable charges as are generally provided by the competitive situation in other fields. On the other hand—especially in a period of small capital investment, meager additions and betterments, and inadequate facilities—the protection of the owners, and hence of the service, against unduly low charges may equally be deemed a proper function of the state. Since the level of railway rates at the termination of Federal Control was admittedly too low—at least until the readjustment of business relations might produce a permanent reduction in the prices of commodities and the wages of labor—and since it has been widely claimed, and frequently admitted, that the rate policy of the Interstate Commerce Commission for more than a decade has been unduly restrictive, this aspect of the regulative process must receive particular attention in an analysis of reconstructive policy. The problem of rates as thus conceived impinges directly on the question of the maintenance of railroad credit.

The level of transportation rates, the status of railroad credit, and the flow of capital investment are all inextricably interwoven. The commitment of funds to commercial and industrial enterprise is motivated almost exclusively by the desire for profit. It is well-nigh axiomatic that new funds will not flow into any undertaking, if the prospect of even limited earnings is uncertain, and the possibility of high speculative returns is absent. When such a situation eventuates in ordinary business undertakings, it may be assumed that public demand is not supporting the enterprise, and that the further investment of economic resources would be socially undesirable. But no such conclusion is justified in the railway field. The scantiness of railway returns may be largely the result of a restrictive policy of public rate control. The carriers' inability to realize adequate earnings does not necessarily involve material over-production of the transportation service or social repudiation of the necessity of that service. Railway rates must be so regulated, therefore, as not merely to protect the roads against the confiscation of their property, but to pro-

vide them with sufficient income to stimulate necessary investment for improvements and extensions.

In the past the rate level has not always been adjusted on such a basis. Both state and federal regulatory agencies have generally deemed it their task to "protect" the public by compelling rate reductions or withstanding proposed advances whenever possible. In its origin this policy was not altogether unreasonable. These agencies were created largely to combat predatory monopolies, whose charges in the light of their capital commitments were often irritatingly excessive, and which were functioning for many years under conditions of constantly decreasing railway costs. But neither of these characteristics are representative of the prevailing situation. Since the powers of the Interstate Commerce Commission were strengthened through the Hepburn amendments in 1906, and especially since authority to suspend rate advances was vested in the Commission in 1910, the costs of railway operation have been constantly growing, and the ability of the carriers to increase their revenues has been rendered more and more difficult. As a result, the task of maintaining interest and dividend payments has too frequently exceeded the financial capacity of the roads, and free capital has found little attraction in railroad securities. The public danger of this situation, and the shortsightedness of the policies—of both the carriers and the regulatory authorities—which contributed to its development, did not receive due recognition until the period of the war, when the burden of traffic was unprecedentedly increased and the necessity of adequate service vitally intensified. It was then realized that for more than a decade the growth in traffic had swiftly outstripped the development of facilities, that both extensive and intensive expansion of railway plant and equipment had been unduly curtailed, that the American transportation system was inadequate.

In view of the causal relationship between service and credit, and between credit and rates, the inadequacy of the transportation service and the demoralization of railroad credit that ac-

companied the resumption of private management, can be remedied, of course (assuming the level of wages and of commodity prices to remain substantially unchanged), through an upward revision of transportation charges. With the readjustment of prices and wages, further rate advances might become unnecessary, and reductions might become feasible. But whatever the absolute level of charges, a more liberal rate policy than in the immediate past, fortified by just provision for the disposition of excess earnings, would doubtless strengthen railroad credit. But the character of the rate policy of the Interstate Commerce Commission is not the sole cause of the impairment of railroad credit, and its speedy rehabilitation demands the adoption of certain subsidiary financial measures, both temporary and permanent, which deserve consideration before we enter upon the question of the regulation of rates and the limitation of profits.

The use of government credit in support of the roads, which constituted one of the essential policies of Federal Control, must be continued for a long enough period to permit a stable adjustment of railway earnings to the exigencies of the industrial situation. Until private capital is once more flowing freely into the transportation industry, it would be disastrous to withdraw the support of government loans at reasonable interest rates, for the purchase of essential equipment and the improvement of facilities. But the financing of the purchase of equipment might also be facilitated, independently of direct government support, through the pooling of railroad credit. A national equipment corporation might be formed, for example, to be administered by representatives of both the railroads and the Government, which could issue obligations secured by newly purchased equipment and lease this equipment to the various carriers without profit. Since it is now the common practice of railway companies to purchase equipment through the issue of their own equipment trust obligations—title in such equipment being vested in a trustee pend-

ing the liquidation of the debt—the proposed plan is peculiarly applicable to this type of financial problem. The national equipment corporation would become a sort of joint trustee for the participating roads, a single large issue of bonds being floated on the equipment security of all these carriers and with the support of their joint credit. Through such pooling of credit, many carriers would be enabled to secure needed locomotives and cars whose independent action would encounter insurmountable obstacles to financing at reasonable rates; the large unified issues of the national corporation would possess elements of strength and safety that would render their appeal to investors much more effective than the small individual issues of single roads.

And the pooling of credit might profitably be extended to other fields than the purchase of equipment. This method can be more widely utilized, for example, in the financing of terminal improvements. In this case the basis of the joint obligations would be property jointly owned and used in common by many carriers. A number of the larger and more important terminals, and a substantial proportion of the local terminal railroads, have resorted to this policy in the past. The present necessity is for an extension of this financial device to the task of improving all of the more congested terminals in which enlargement of plant and coördination of facilities is a vital need. In some of our terminal cities the valuable monopoly holdings of a single company stand in the way of joint action. Corporations whose early development or special foresight enabled them to acquire strategic sites for stations and yards are loath to surrender their monopolistic advantages. The leverage of vested ownership is thus made to obstruct desirable plans for the coördination and common use of existing facilities, or for the joint financing of such improvements as are deemed necessary for the general good. While established interests are entitled to reasonable recognition, and to just compensation when appropriated to the public use, the abuses incident to exclusive ownership or control of terminal proper-

ties render this a legitimate field for government intervention. The Interstate Commerce Commission might very properly, and to the decided advantage of the public interest, be authorized, under the power to compel adequate service, to order necessary terminal improvements, to be jointly financed by the carriers concerned. Credit difficulties would thereby be relieved and the efficiency of the transportation service greatly enhanced.

But the advantages inherent in the pooling of credit can be most effectively realized through actual railroad consolidation. In the preceding chapter the need of unification was considered primarily from the standpoint of operation and service. It is equally essential for the strengthening of railroad credit. Extensive consolidation of transportation lines means the massing of railway resources on a grand scale—the pooling of credit in most comprehensive fashion—and if such a policy is likely to prove advantageous in the specific tasks of equipment purchases and terminal improvements, it is bound to advance the general credit situation. As a systematic regional scheme of railroad consolidation is slowly evolved out of our multifarious network of independent transportation lines, the basic difficulties of the credit situation will be gradually cleared away. Specifically, one of the most stubborn sources of difficulty is to be found in the "strong and weak road problem." However liberal the efforts of the public authorities to establish adequate rates for the carriers as a whole, and however extensive the informal methods of financial coöperation entered into by the railroad corporations, the presence of independent "weak roads" in the transportation system is bound to injure the status of railroad credit. These roads continue to operate at a disadvantage, financially as well as physically, causing undermaintenance of their existing facilities and inability to provide reasonable extensions and improvements; they thus impair the transportation service as a whole, and prevent the development of the communities dependent upon them. And complete failure of

the weakest of them tends to undermine the confidence of investors in the entire list of railroad securities. The strong and weak road problem constitutes as significant an element in the question of railroad credit as in the formulation of rules of rate-making. Only through a sufficiently comprehensive policy of compulsory railroad consolidation can it be finally adjusted.

But such positive measures as have thus far been suggested are bound to prove futile, if unaccompanied by vigorous and effective public control of the issuance of railroad securities. Private financial mismanagement, in the form of inflated capitalization and improper disposition of capital funds, has served as one of the most potent obstacles to the sufficiency of the rate level, the maintenance of railroad credit, and the adequate development of the transportation service. This obstacle must be removed, if the railroad industry is to cease providing a fruitful field for speculative operations, if the confidence of capital in railroad investment is to be restored, and if the public is to have reasonable assurance that the advantages of a more liberal rate policy will not be dissipated through dishonest or imprudent financial management.

The regulation of railway security issues, as of all corporate securities, might be strongly urged on the ground of affording protection to *bona fide* investors. The evils of overcapitalization and financial manipulation are many; and the defrauding of innocent investors and minority shareholders by "insiders" is not the least of them. Under the complexities of business organization and intercorporate relationships that prevail to-day, the doctrine of *caveat emptor,* as applied to corporation securities generally, is as inadequate socially as the *laissez-faire* philosophy which gave it birth. But when the problem of improper capitalization is viewed from the standpoint of the private investor, the railroads are not the only, nor even the chief, offenders. Loose financial practices have pervaded the entire industrial field. Whether or not the power of government shall be used to protect unwary purchasers of

stocks and bonds is a problem in which all corporations are on substantially the same plane, and in which the entire question of the proper extent of public interference with private enterprise is involved. But whatever policy may be adopted as to this larger problem, the necessity of security regulation in the railroad industry cannot be questioned.

There is as distinct a public warrant for the regulation of railroad security issues as there is a definite public interest in the maintenance of reasonable rates, adequate service, and sound credit. In its broadest aspect, the regulatory function may best be defined as an attempt to secure to the public the best service compatible with reasonable rates. Such rates and service are impossible of achievement without sound credit. And after more than thirty years of experience with railroad regulation by the Federal Government, the conviction has become firmly established that no one of these objectives can be satisfactorily attained under conditions of unlimited corporate freedom in the matter of financial organization. Unwarranted inflation of capital issues, unwise arrangement of securities, and unscrupulous manipulation have emerged periodically even in recent years. These practices have exerted, and are bound to exert, a significant influence upon rates, service, and credit.[8]

A marked conflict of opinion has always existed as to whether capitalization produces any effect on rates. The spokesmen for the railroads have generally denied the existence of any such relationship. In the initiation of railway charges, they argue, the value of the service, and its cost as far as ascertainable, are the primary considerations; the amount of outstanding securities plays no part in the adjustment. And in the public regulation of rates, the clear trend of both judicial and commission opinion is against the recognition

[8] An excellent recent discussion of the effect of capitalization on rates and service and its influence on credit is to be found in James C. Bonbright, *Railroad Capitalization*, chapters I and II, pp. 13-63 (*Columbia Studies in History, Economics and Public Law*, Vol. XCV, No. 1). See also. *ibid.*, Appendix A and B, pp. 156-168.

of the volume of outstanding securities, fictitious as well as genuine, as a basis of "fair value." These contentions may be accepted as valid in principle, but there is ample testimony that in practice over-capitalization tends to result in excessive charges.

Capitalization is frequently accepted as evidence of investment, if not as a distinct factor in determining the value base on which the reasonableness of rates is to be tested; and the necessity of supporting railway credit—the strength of which is determined, concretely, by the return available on stocks and bonds, rather than by the general extent of transportation revenue—often leads to an increase in the rate of return because of inflated capitalization.[9] "It is often said," in the words of Interstate Commerce Commissioner Clements, "that capitalization has nothing to do with the question of reasonable rates. Perhaps legally and technically speaking that is true, but as a matter of fact it is never left out of view."[10] However strictly railway charges may be regulated, the excessive issuance of securities creates vested interests that few courts or commissions have the hardihood to ignore altogether. It is generally true that rates are not explicitly and directly based on capitalization; but the inevitable, though indirect, relationship between them, especially through the medium of the rate of return as affected by the credit influence, has repeatedly received recognition by the regulating authorities. The Interstate Commerce Commission has clearly discerned the character of the more important circumstances which create this intimate relationship between the volume of railway securities and the level of railway charges:

"When one holds in mind how persistently the courts oppose the enforced approach of railway tariffs to the line of confiscation; when one comes to realize how eager the carriers are to restore to their property accounts the value of the improve-

[9] *Cf.* James C. Bonbright, *op. cit.*, pp. 36-37.
[10] National Association of Railway Commissioners, Proceedings, 24th convention, 1912, p. 219.

ments of past years paid out of revenues; when one clearly understands that so long as railways which operate on different levels of cost continue to compete for the same traffic, there must result a permanent differential profit to the more fortunate road; and, finally, when one reflects upon the fact that securities once issued are ordinarily beyond recall and beyond control, it is difficult to see how one can assert that the kind and amount of securities issued by a public service industry have no bearing on the problem of railway tariffs as that problem must be regarded by the commission and by the courts." [11]

The adverse effect of over-capitalization on service is more direct and more significant: the demands of the transportation service that the financial structure be sound are even more compelling than the necessities of reasonable rate adjustment. The most clearly recognized responsibility of railway managements is to earn profits for the shareholders who placed them in power. Unsound financing, under such circumstances, subjects these managements to an irresistible pressure for the realization of earnings and the distribution of dividends that are not legitimately provided by the flow of transportation revenue. Impairment of the service is an inevitable outcome of this situation. Either the plant is neglected, in order that an apparently favorable financial showing may be made and the credit of the carrier temporarily maintained, or the market estimate of the carrier's securities becomes so depressed that its ability to attract new funds for needed improvements and extensions is almost entirely destroyed. In most instances of inflated or improper capitalization, both of these results follow, ultimately leading to serious financial embarrassment, receivership, reorganization, and a laborious struggle to obtain funds for the rehabilitation of the property.

Flagrant resort to stock watering is generally accompanied by a variety of questionable practices designed to give an appearance of substance and reality to the nominal capitalization—to the inevitable impairment of service, the misuse of

[11] Twenty-second Annual Report of the Interstate Commerce Commission, 1908, p. 86.

operating revenue, and the ultimate destruction of railroad credit. Maintenance is reduced to the lowest possible limits; insufficient depreciation reserves are set up to retain the original investment intact; no provision is made for business contingencies. The property is thereby stripped and the service is cheapened—in order that interest may be paid and dividends maintained. And not infrequently the complexities of an unsound financial structure, and the improper practices just indicated, lead to dishonest misrepresentation and manipulation.[12] The same general result follows. Railroad credit is

[12] *Cf.* the following account of some of the subsidiary methods often resorted to in connection with the practice of stock watering: "Although stock watering is a favorite device by which speculative financiers attempt to inflate market values, it is not the only device. Indeed, unless used in connection with other methods of creating false hopes, it is not apt to be effective. Promoters never rely solely on the tendency of investors to think that more stock means more earnings; they attempt to further that tendency by various kinds of manipulation. Glowing prospectuses and optimistic financial statements are issued; investors are assured that the higher capitalization is justified by the increased earning power that may be expected as a result of the new management, or as a result of the advantages of consolidation with other companies. The deception may be even more downright: it may take the form of falsified earnings statements, 'padded' balance sheets, and false rumors of increased dividends.

"American railway history can show many examples of these forms of deception, although, in recent years, the situation has been much improved by the strict accounting regulations of the Interstate Commerce Commission. The Erie, in its early days, seriously overstated its earnings in order to pay unearned dividends. The Louisville and Nashville is reported by the Interstate Commerce Commission to have made improper charges on its balance sheet to property account in order to offset the liabilities created by a series of stock dividends issued between 1860 and 1891. (33 I. C. C. Rep. 168, [1915].) More recent cases of misrepresentation have been brought to light by several railway failures occurring within the last few years. Part of the troubles of the Pere Marquette and of the Cincinnati, Hamilton & Dayton was attributed by the Interstate Commerce Commission to an excessive capitalization placed upon the companies in the early part of the present century by a speculative and unscrupulous management. In order to make a market for these securities, interest and dividends were paid out of capital—a fact which was concealed by improper charges to capital account. (44 I. C. C. Rep. 1 [1917].) By similar practices the Rock Island management, under the Reid-Moore control, attempted to give an appearance of reality to a grossly inflated capitalization. (36 I. C. C. Rep. 43 [1915].)" James C. Bonbright, *op. cit.*, pp. 57-58.

weakened and the provision of adequate service rendered impossible. However extensive the authority of the Interstate Commerce Commission to regulate the transportation service, its efforts will be futile, if the carriers, because of financial mismanagement, are deprived of necessary funds with which to maintain an adequate service. It is an integral part of the regulative process, therefore, particularly from the standpoint of service, to prevent, as far as possible, the existence of overcapitalization in the railroad industry, and to remove the danger of uncontrolled financial raiding of the carriers by the first selfishly-minded and unscrupulous management that may be raised to power.[18]

It appears from the foregoing analysis that improper capitalization leads to excessive charges and to impaired service largely through its destructive influence upon the credit of the carriers concerned. The rate of return allowed to the railroads by regulatory agencies tends to be increased, in order that a sufficient flow of new capital may be attracted into the field, and under-maintenance of plant and equipment, as well as inability to provide for necessary improvements and extensions, are induced by demoralization of credit. This adverse credit influence may spring from the undesirable ar-

[18] "Perhaps the two best examples in recent railroad history of the evils of stock watering to which we have alluded are the Alton reorganization in 1899-1900 and the Rock Island reorganization in 1902. Before its reorganization, each of these roads was in sound financial condition and was able to pay reasonable dividends on a conservative capitalization. Then came the new managements, with policies of expansion and with promises of greatly increased earnings. In order to enhance the market values of the securities and thus to sell out at a handsome profit, these controlling interests proceeded by various devices to inflate the capitalization far out of proportion to the increased investment in the properties. For a short period of time, the increase in the nominal capitalization caused the market value of the stocks and bonds to rise far above the old figures. But soon it became evident that the heavier burden of interest and dividends was far beyond the ability of the companies to pay. Then the bubbles burst. The Rock Island, in 1915, went into the hands of a receiver, and the Alton, its credit seriously impaired, barely escaped a similar fate owing, it is said, to the financial support of the Union Pacific." *Ibid.*, pp. 55-56.

rangement of capitalization as well as from the excessive issuance of securities. The overloading of the financial plan with bonded indebtedness creates a mass of fixed obligations which must be met even in the face of seriously contracting revenues, and leads directly to failure, receivership, and reorganization. The inclusion of unwarranted amounts of preferred stocks, especially when cumulative, likewise operates to bring on financial embarrassment, through the weakening of credit and the draining of essential working capital, in spite of the fact that preferred stocks, from the legal standpoint, create contingent rather than fixed obligations. And even such inflation as manifests itself through the overissue of common stocks tends to introduce credit difficulties, because neither the contingent character of the obligation nor the absence of a fixed dividend rate destroys altogether the influence of the fact that the security holder's expectations must necessarily be disappointed when the flow of transportation revenue renders the carrier incapable of initiating or maintaining a policy of dividend disbursement.[14] A sound credit structure cannot be reared on unsound financial foundations.

Credit is also subject to intangible influences. The basis for its maintenance is largely psychological in character, consisting in the confidence of the public that the corporations involved will be able to meet their financial obligations, fixed and contingent. In the not distant past railroad securities commanded such confidence. In the early part of the present century the issues of our better railway companies were among the most salable securities on the market, the public confidence shown toward them being incomparably greater than that accorded to the stocks and bonds of industrial corporations. In the past decade or more, however, a number of factors have been operative tending to destroy this confidence. The railroads, in the main, explain this radical change in public attitude by exclusive reference to the strengthening of the regulative process

[14] *Cf. Ibid.*, pp. 61-62.

and the imposition of an unduly restrictive rate policy; the hostility of the state commissions, and the refusal of the Interstate Commerce Commission, in a number of notable and much-discussed cases, to permit any substantial increase in the rate level, in spite of increasing costs of operation, are made to bear the brunt of the responsibility. This diagnosis of the carriers would be fully justified only if the reasonableness of the rate level were tested by the rate of return it would yield on actual investment, honestly and prudently made, without addition of unwarranted speculative and intangible elements of value, and if the roads had been free of the financial malpractice which has so frequently resulted in the dissipation of railroad capital and the misdirection of transportation earnings.[15] But these railway claims, whether true or false, have played their part in the impairment of railway credit. The carriers found themselves in the anomalous position of destroying their credit in the attempt to preserve and strengthen it—through the confession of financial weakness involved in their representations to the Interstate Commerce Commission and other investigatory bodies, and through the pessimistic tone of their appeals to the public. This situation made the financing of improvements and refunding operations increasingly difficult, and compelled a growing resort to the issuance of bonds rather than of capital stocks—a factor which further weakened the financial status of the railroads. As a result, therefore, of both the conservative attitude of the regulatory commissions and of the propagandist activities of the roads, public confidence in the adequacy and stability of railway earnings was seriously shaken.

But an equally potent cause of this gradual undermining of public confidence, which is of the very essence of credit, was the frequent irresponsibility and intermittent dishonesty of

[15] For an interesting, and somewhat detailed, presentation of both sides of this controversy, see the correspondence between Charles C. McChord, of the Interstate Commerce Commission, and Francis H. Sisson, Vice-President of the Guaranty Trust Company, which is incorporated in the record of the Senate Hearings, pp. 286-297.

railway managements. The spectacle of the New Haven and Rock Island disasters, for example, was not without its effect. While dangerously speculative financing had characterized railroad development in this country from the beginning, in these and similar cases imprudent or fraudulent dealings had in a few years reduced well-established and successful transportation systems to bankruptcy. Confidence in railway financial management could not withstand such shocks without demoralization of credit. Add to this condition of affairs the fact that inflated capitalization had rendered it impossible for many roads to disburse any substantial dividends in spite of reasonably adequate earnings on their *bona fide* investment, and the further fact that such destruction of confidence as we have been noting inevitably sweeps more widely than it should, tending to impair the credit position of soundly financed and conservatively managed corporations along with that of the companies directly guilty of abuse—and the decline of railroad credit in the years immediately preceding the Great War is easily comprehensible.[16]

These considerations—both intimately and vitally connected with the essential elements of the regulative process—constitute the basis of the need of public regulation of railroad security issues. Such regulation is an indispensable, if subsidiary, means of maintaining a continuous flow of adequate transportation service at reasonable rates. The development of appropriate principles and machinery of government control over capitalization and capital expenditures would remove altogether the possibility of further resort to the more flagrant types of financial manipulation; and it would tend to insure that capital committed to railroad enterprise is really necessary, that it is legitimately used for legitimate purposes, that the total quantity of securities issued is reasonably equivalent to the value of the property received, and that the obligations which they represent, by virtue of the arrangement of

[16] *Cf.* Max Thelen, "Desirable Scope and Method of Federal Regulation of Railroad Securities," *Annals*, March, 1918, p. 191.

the corporate instruments, are not imposing an undue burden upon the normal earning capacity of the roads involved. Such a system of regulation predicates the approval of governmental authority as a condition of the issuance of railroad securities, and a reasonable degree of supervision over the actual disbursement of capital expenditures. While it is impracticable through financial regulation of this character, or in any other way perhaps, to eliminate altogether the possibility of railroad failures, and while it is undesirable that such government control should constitute—even by implication—any guaranty, legal or moral, of the financial validity or merit of railway security issues, the public would certainly enjoy a reliable assurance that capital funds committed to railroad undertakings are being subjected only to the normal risks of industrial enterprise. The establishment and progressive development of such regulative policy, coupled with a continuance of the practice followed by many of the roads of reinvesting surplus earnings, would, even in the absence of any attempt to scale down existing over-capitalization, gradually remove from the carriers the general stigma and concrete obstacles that spring from a condition of inflated capitalization, and substantially improve their ability to issue securities upon which the actual payment of an adequate return would be feasible. The wise performance of this regulative function would help restore to the railroads the public confidence which they once enjoyed, and of which they are in special need during the present critical condition of railroad credit.

In order that security regulation may be effective, it must be uniform. Government authority must be centralized; its scope must be national, and the agency for its exercise, federal. More than twenty of the states have provision for the regulation of the securities of railroads and other public utilities. The activities of the more important of these states—notably Massachusetts, New York, Wisconsin, and California—have been highly successful as applied to local utilities and will prove helpful, even as regards the railroads, by pointing

the method and direction of federal control. But that state regulation is inadequate in the railway field is evidenced by the emergence, even in recent years, of the many cases of flagrant financial abuse to which reference has already been made. Responsibility for this situation does not attach exclusively to the inaction or unwise action of particular states or of their commissions; it is an inevitable outcome of the dominantly interstate character of our transportation lines and of the limited jurisdiction of state authority. Moreover, the diversity of principle and practice necessarily involved in state regulation, in addition to the anomaly of attempting to split up the railway systems in accordance with state boundaries for financial purposes, must render such regulation cumbersome, confusing, expensive, and ineffective. The considerations involved are similar in character to those already discussed in connection with the regulation of rates and service. Federal control is the only practical means available for securing uniformity and effectiveness in the regulation of security issues. Moreover, this federal jurisdiction ought not to be made concurrent with that of the states. Such extension of federal power would but subject the carriers to one additional master, and would tend to promote those conflicts between state and federal authority which have proved so troublesome in the regulation of railway rates. Railway security regulation, then, must be federal, and exclusively federal.

Finally, the method of actual administrative control must be adopted, and not the mere policy of publicity. This judgment is enforced by the entire history of railroad regulation, as well as by the experience of the states in the supervision of security issues. The old advisory commissions gave way to those of the mandatory type because the mere reliance upon the pressure of public opinion did not serve to adjust promptly and equitably the many complexities of railroad relationships. And a similar conclusion has been found to be amply warranted in the narrower field of security regulation. While

enforced publicity (through the filing of a public record of financial transactions) might serve to protect some investors against the purchase of worthless securities and might restrain some managements from resorting to flagrant manipulations, the public interest involved in the maintenance of a reasonable correspondence between investment and capitalization, and in the complete elimination of fraudulent and imprudent financial practices, necessitates the more drastic policy of positive control. The recognition of this necessity has led practically all of the state governments by which security regulation has been attempted to clothe their commissions with affirmative power for granting or withholding approval of proposed security issues, upon application of the carriers, and for determining the terms and conditions for their issuance. The activities of the states in this regard may profitably serve as a basis for the establishment of federal regulation. Direct Congressional enactment of specific rules should be reduced to a minimum; the Interstate Commerce Commission should be clothed with plenary power and wide administrative discretion; and the experience of the state commissions, as modified or molded by judicial decision, should serve as a starting-point for the development by the Commission of principles of railroad capitalization.

§4. *The Limitation of Financial Return*

The general significance of this final problem has already been indicated. It now constitutes the central task of the policy of railroad regulation. The very term "rate reasonableness" has largely lost its primary meaning—a reasonable interrelationship of charges—and has come through judicial interpretation to connote a reasonable rate level—that is, such a level of charges as will yield reasonable returns on the value of the transportation properties. The proper limitation of railway profits—involving the protection of the public against

monopolistic gain, the protection of the carriers against virtual confiscation, and the protection of the service against the impairment of railroad credit—has thus become the dominant purpose of regulatory activity. It will be our task, therefore, first to trace briefly the development of the pre-war legislative and judicial attitude toward this question, and then to consider the principles and problems involved in sound reconstructive policy.

In the early days of public control there was no such clear differentiation between the two types of rate regulation as we have assumed in this discussion. The Granger Movement of the early seventies gave the original impetus to state regulation, and the background of that movement was a general resentment at excessive charges—whether considered singly, or as constituting a rate level. Railway rates were claimed to be unreasonable, and hence the remedy adopted by the mid-western states was to declare unreasonable rates to be unlawful, to establish by legislative enactment many schedules of maximum charges, and to create commissions for the enforcement of "reasonable" rates. In taking these steps the state legislatures failed to recognize the twofold task of the function of rate-making. They had held unreasonable rates to be unlawful, but they did not establish standards of reasonableness. In the beginning, however, this half-way policy created no serious difficulties. The legislative power was declared to be supreme, the courts acknowledging no judicial responsibility to protect the carriers even against confiscation. The polls and not the courts were suggested as the proper source of relief from unduly restrictive adjustments by legislatures and commissions. No need was perceived, therefore, for the establishment of a base upon which the extent of the financial yield might be computed or for the definition of what constitutes a proper return in railroad enterprise. But this attitude of the courts did not long persist. In the course of the decade following the notable granger cases the doctrine of judicial review gradually emerged and later became firmly established.

In the exercise of their power of review the courts declared unduly low rates, when prescribed by public authority, to constitute partial confiscation of privately owned property without due process of law and therefore invalid under the constitutional guarantees of the fourteenth amendment. And when the system of federal regulation was instituted, it likewise adopted the earlier state practice of merely declaring unreasonable rates to be unlawful and prohibited, without enunciation of standards of reasonableness, and thereby also subjected this issue to judicial determination.

The ultimate burden of financial regulation, therefore, was thrown upon the courts. In the absence of legislative guidance, they were forced to formulate standards of reasonableness as well as to apply them. In the now famous case of Smyth v. Ames, decided in 1898, the Supreme Court of the United States declared that "the basis of all calculation as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public," or that "what the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience." The court enumerated various considerations that must "be given such weight as may be just and right" in the ascertainment of such value in each case—among them "the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses." [17] Subsequent administrative and judicial history in this respect has been concerned primarily with the task of reading some meaning into the Smyth v. Ames dictum; and in the course of this process the problem of the valuation of railroad property has attained

[17] 169 U. S. 466.

a position of central importance in the performance of the regulative function.

Since the courts were thus seeking to perform the duty of protecting the carriers against rates which, through failure to permit "a fair return upon a fair value of the property devoted to the public service," would amount to substantial confiscation, they were necessarily compelled to determine the value of railroad plant and facilities. But "fair value" has remained a vague and uncertain concept—being inherently dependent upon the demands of public policy rather than upon rigid requirements of legal rule—and no definitive standards of valuation have been accepted. Actual cost, ascertained through historical records or by means of current estimates; reproduction cost, with and without allowance for depreciation, and based upon restoration of the identical units of the plant or upon its replacement by such instrumentalities as are capable of rendering a substantially identical service; and even market value, based upon earning capacity or upon the commercial estimate of the value of railroad securities, have all received varying degrees of recognition by courts and commissions. And no one of these standards, even when selected as the dominant principle of valuation, has been logically and consistently applied to all the various elements, tangible and intangible, which are generally offered for consideration in the valuation process. The results have been both repressive and chaotic. Without a definite legislative rule of rate-making, the Interstate Commerce Commission has been unable to adjust the rate level to the financial needs of the carriers; and the courts, from the very nature of the judicial function, have been incapable of performing successfully the discretionary legislative-administrative task of rate-making thrust upon them.

In view of these circumstances, it was generally agreed that the interregnum of Federal Control and the reorganization of regulative principle and machinery that was to follow it offered the waited opportunity to face squarely the problem of

profit limitation and control. There were, it is true, serious difficulties involved in the problem. To solve it adequately meant the establishment of a system of regulation that would balance nicely the conflicting interests of the carriers and the public: that would make possible the determination of a rate level that is neither exorbitant, in the light of the service rendered, nor so restrictive, in view of the capital commitments of the carriers, as to hamper the flow of new investment into the transportation industry. Moreover, the presence in the American railway net of both strikingly prosperous and distinctly poor roads, coupled with the commercial necessity of adjusting rates for similar competitive services (as, for example, between the same points, but over both direct and circuitous routes) on a uniform and self-consistent basis, offered difficult obstacles to the formulation of a rule of rate-making that would prove equitable to all interests. Finally, any radical break with the old system of regulation was likely to encounter legal difficulties; for the courts, during the past three decades, have been piling up a mass of decisions and dicta on the question of valuation. In spite of all these difficulties, however, the need of new financial adjustments was too urgent to be longer neglected.

One simple and obvious way out of the rate policy *impasse* which is said to have impaired railroad credit so disastrously is through a government guaranty of a definite return. This would mean, broadly speaking, a continuation of the financial arrangement that prevailed during the period of Federal Control. Under that arrangement, as we know, the Government guaranteed to pay the roads a fixed annual return or rental during the continuance of public operation of the transportation properties. This rental or standard return, as it happened, was computed as a gross amount, based on the average annual operating income of the carriers for a stated three-year period. Whether a new and permanent guaranty take this specific form, or be estimated as a fixed percentage on

the property value, or in any other way, the character of the public policy involved would be essentially the same. The Government would be obligated to pay the roads a fixed or definitely ascertainable income, the necessary funds to be drawn from the public treasury if the current railroad rates were incapable of producing them.

Such a policy, though not infrequently suggested as a desirable remedy, is open to grave objections. It would involve the danger of placing a substantial portion of the burden of transportation costs upon the general taxpayer, instead of upon the shippers and traveling public who are the recipients of the service. The prospect of being compelled to shoulder such a burden was one of the prime factors responsible for the marked public disfavor which met the proposal for an extension of the tenure of Federal Control. Furthermore, the enactment of such an absolute guaranty would necessarily involve participation by the Government in the tasks of management. It is obvious that no public assumption of fixed financial obligations would be justified without public control of the details of operation. Without such joint administration of the railroad properties by the private carriers and the public authorities, the government guaranty would be subject to intolerable abuse; and with such public participation in the tasks of management, the policy of providing a guaranty of earnings would constitute but a feeble half-way measure toward railroad nationalization. The chief motive for the retention of corporate ownership, and the basic assumption of the philosophy of regulation, are alike grounded in the belief that private initiative must be conserved and public interference must stop short of the domain of management. If, therefore, the Government were to retain or to assume any substantial rôle in the administration of the carriers, the fundamental obstacle to out and out government ownership would be removed. The considerations which would justify a government guaranty so conceived would provide even stronger justification for complete railroad nationalization, through which all the incidents of

ownership would be vested in the Government, including the profits of operation and the full risks of the enterprise.[18]

The alternative to an absolute government guaranty, under a system of private ownership and operation, is to modify such elements of traditional policy as are generally acknowledged to have contributed to the outstanding difficulties of rate regulation and profit restriction. As a basis for such modification it is necessary to recognize, in actual practice no less than in judicial dicta, that rate-making is essentially a legislative function. This means that legislatures, and the national Congress in particular, must complete their rate-making tasks by establishing standards of rate reasonableness. In the words of many of the recent plans for the solution of the rate difficulty, Congress must enact a statutory rule of rate-making. Such a rule would involve two elements. First, it would indicate the measure of the rate of return, for the guidance of the Commission in establishing schedules of transportation charges; and second, it would specify the base upon which such rate of return should be computed, that is, presumably, the standard to be adopted in the valuation of railroad property.

It is decidedly questionable whether direct legislative specification of a definite rate of return would be desirable. Just as the schedules of maximum charges, so many of which have been enacted by our state legislatures, have proved inflexible and therefore burdensome, so any specific rate of return that may be prescribed by Congress, however just and adequate it may be at the moment, would bind the roads and the people to an inelastic and hampering standard. With money market conditions in constant process of change, and with the continuous development of other industrial enterprises which compete with the railroads for the flow of free capital, such

[18] For a more complete statement of the contention that any halfway policy of railroad nationalization is not feasible, and for a detailed discussion of the present-day obstacles to government ownership and operation, see chapter VI, *supra*, on "The Question of Railroad Nationalization."

a rate of return might very readily prove disadvantageous either to the carriers or to the public. The legislative duty in this respect might properly be discharged by unambiguous instructions to the Commission that the needs of the transportation service and the exigencies of the credit situation must be taken into account in the determination of a fair rate of return. But the concrete task of fixing a specific rate of return is a function that can more effectively be exercised by an administrative agency. If the Interstate Commerce Commission is clothed with authority to fix transportation charges at such a level as will yield a fair rate of return on the value of the carriers' property, giving due consideration to the necessity of supporting railroad credit and to all the conditions, external as well as internal, affecting such credit, and to specify explicitly, from time to time, what will be considered such a fair rate of return, with power of modification as occasion may dictate, the traditional difficulties springing from the lack of certainty as to the measure of the rate of return will be largely removed.

The question of the base upon which the rate of return shall be calculated is a much more intricate one and calls for more drastic change of policy. At least two lines of action are open. Congress might merely adopt the dictum of the courts and recognize "fair value" as the accepted basis for the computation of financial returns, specifying more clearly, perhaps, the relative weight to be accorded to the various elements that have traditionally emerged in the process of railroad valuation; or it might completely desert the judicial doctrine of "fair value" and explicitly declare actual investment, honestly and prudently made, to constitute the legal basis of railway returns.

The first solution would constitute but a nominal resumption by the legislature of its rate-making power. If the "fair value" basis is accepted, the final determination of the validity of rate schedules, and of the value base for the calculation of financial returns, would still remain in the courts. The way

would lie open to any carrier that deemed itself aggrieved by the schedules of charges prescribed by the Commission to file complaint on the ground that an unfair valuation standard had been used. Under such circumstances, the rate question would continue unsettled until such time as the judicial mind becomes clear on the entire valuation problem. While it may be expected that the completion of the long task of the Interstate Commerce Commission in valuing the transportation properties of the railroads would aid in the establishment of a basis which the courts might be able to accept definitively, there would be no assurance in the situation.

Moreover, with the retention of the valuation process as the central factor in the financial regulation of the carriers, the determination of the rate level would continue to be subject to speculative influences, and the administrative and judicial adjustments to constant modification. One of the serious difficulties of the old system sprang from the tendency of the courts to define "fair value" in terms of reproduction cost. The acceptance of this valuation standard—rendered possible, as has been suggested, because no other was authoritatively enunciated by the national legislature—gives to any valuation that may be fixed only a transitory importance. The estimated cost of reproducing a property changes with every variation in the unit prices employed in the computation, with every accretion of land value resulting from the growth or changed character of the community in which the railroad lands are situated, and, in the past, with every development of the valuation standard itself, as the carriers have forced new elements of reproductive value into recognition. Value determinations of this character are not only vitiated, in a public service industry, by the many speculative influences at work, arising out of conditions that are largely extraneous to and independent of the performance of the transportation function, but they provide a constantly shifting basis for the limitation of financial return. Such consequences have proved to be inherent in the

acceptance of the "fair value" concept and its accompanying emphasis upon the valuation process.

What is proposed, therefore, is tantamount to the abandonment of the "fair value" policy, in so far as the existing status of judicial decision will permit. Congressional failure to enact a statutory rule of rate-making is responsible for the dominance of the courts in the financial regulation of the carriers; this domination, in turn, is responsible for the emergence of the "fair value" concept and the development of the valuation problem; and the chaotic unfolding of the valuation process is responsible for the anomalies and uncertainties of the reproduction cost method as used in the determination of a base for the purpose of rate-making.

Actual cost of the property used in the transportation service, or actual investment committed to railroad enterprise, when honestly and prudently made, constitutes the natural basis for the computation of the fair rate of return to which those engaged in the operation of a public service industry are reasonably entitled. If railway earnings were based upon such investment, the owners of the properties would receive as liberal a return as they may legitimately claim, and the users of the service would be relieved of the burden of paying a return, through the medium of transportation charges, upon such speculative increments of value as arise independently of the performance of the transportation function. What railroad shareholders contribute for the benefit of the public is not the property used in the transportation service, but the funds which render possible the construction and purchase of that property. They are entitled, therefore, to a fair return on their investment, and not upon a constantly changing "value" that may inhere in the property that results from the utilization of their investment.[19] Nor would the acceptance of this invest-

[19] *Cf.* the following analysis of the situation by George W. Anderson, "How to Get Rid of the Reproduction Cost Theory," *The Utilities Magazine*, Vol. I, No. 3 (Jan., 1916), pp. 31-32:

". . . What does the community really ask of private investors when it offers a franchise for the creation of a public utility? Two things,—

ment basis necessarily lead to an illiberal rate policy. The needs of the transportation service and the exigencies of the credit situation must always be taken into account in the adjustment of the level of charges. But their influence should manifest itself directly and naturally in the rate of return and not indirectly and artificially in the valuation basis. The recognition of all these compelling circumstances, and their enactment by Congress into a rule of rate-making stipulating that actual investment, honestly and prudently made, is to constitute the legal standard for the calculation of the fair rate of return, would lead to a more equitable and a more stable policy of limitation of railroad income than has been traditionally developed.

It may, with justice, be argued that the adoption of such a policy at this late stage in the development of American railroads, and of the constitutional guarantees against confiscation, would prove unduly drastic and legally impracticable. In view of the numerous decisions in which the "fair value" principle has received unequivocal recognition, in spite of many conflicts of authority as to the nature and relative significance of the elements that constitute "fair value," the legislative declaration that investment must be accepted as the basis of the fair return may not command judicial sanction. Reliable legal opinion may be cited in support of both sides of this constitutional question. But more important than the alleged

and only two things: money and management. It does not ask that private investors furnish lands or rails or engines or gas pipes, or other implements. It asks for capital and the management of that capital. The lands and rails and other implements are but the secondary results of the devotion of the investors' money to a public purpose. . . .

"If the proposition that all that private investors furnish these public utility companies is money and management be sound, it follows that all that the court in the performance of its anti-confiscatory duties has to do, is to prevent the confiscation of that which is furnished.

"The fatal defect in the rulings that the courts have made is that they have failed to see that what the investors furnished, viz.,—money, and not what they did not furnish, viz.,—the ephemeral and changing results of the investment of that money, was the property entitled to protection from confiscation."

legal difficulties involved are the ethical considerations that may rightfully be urged. While vested interests may not have been justly, or even honestly, derived in the first instance, they may be held in all good faith by their present owners, and therefore properly entitled to respect and protection. It is not certain that the capital investment in the railroad industry —extending, now, for a period of almost a century—would have been as readily forthcoming if the restriction of profits now contemplated had been operative from the beginning. A sweeping acceptance of the investment basis, *ex post facto,* might involve expropriation of established rights, and such uncompensated expropriation would be inconsistent with sound public policy. There is the practical difficulty, moreover, of ascertaining actual cost figures, either from the records of original investment, or through estimate, on the basis of existing evidences of original investment. It would probably be wise, therefore, upon completion by the Interstate Commerce Commission of its valuation of railroad properties now in progress, to accept its results of "present value" as a starting point for the rate-making base, with an express legislative provision that, for the future, actual additional investment, honestly and prudently made, is to constitute the only valid claim for an increase in this value. Such an adjustment would represent a workable compromise in the light of the complex facts of the situation. It would supply a definite and easily comprehensible standard which, once accepted by the courts, would be subject to no further adjudication, and which could be applied simply, free from the inconsistencies and difficulties tied up in the cost of reproduction method. Fair value would thus be legislatively defined in advance, instead of being left to the vicissitudes of subsequent judicial determination.

At least one very serious drawback would still remain, even if the entire policy of profit limitation outlined above were effectively incorporated into law. The level of charges established in accordance with its terms would be applicable, not

to individual roads, but to the carriers as a whole, or as divided into rate-making groups. But since this rate level would provide uniform charges for competing lines, and for carriers performing substantially similar services, the stronger roads—those possessing special advantages because of favorable location, an early start, government aid, or superior management—would be enabled to realize excessive earnings from the performance of their public service. Such an outcome is bound to persist under any system of private management involving multiple corporate ownership. No uniform rate level can produce the same financial results for the weak roads as for the strong. And in the absence of a comprehensive system of railroad consolidation, these differences in earning power are very glaring, and give rise to large corporate surpluses that should equitably be vested, to a large extent, in the public.[20]

Some provision must be made, therefore, for the recapture of excess profits by the Government. It would serve to render

[20] The following analysis presents concretely the problem of the emergence of excess earnings that must be faced by the regulating authorities: "One of the principal difficulties in securing a general increase in rates during the last ten years has been the ever present idea in the mind of the commission that an increase in rates which would give only sufficient revenue to the majority of railroads would give a revenue greatly in excess of the needs of the strong roads. This is inevitable under a competitive system of transportation. Take for example the cases of four competing systems in the Middle West, the Chicago, Burlington & Quincy, the Chicago & Northwestern, the Rock Island, and the Chicago Great Western—all systems which compete for a very considerable portion of their traffic. During the three pre-war years the Burlington earned on an average more than 25 per cent. on its capital stock; the Chicago & Northwestern about 12 per cent., and the other two railroads only about 1 or 2 per cent. These three pre-war years were the best years, on the average, which the railroads ever had, and yet two of these four large systems were unable to establish their credit on the existing basis of rates. If rates were raised to a point which would establish the credit of the two weaker roads it would result in giving the Burlington and the Chicago & Northwestern revenue vastly in excess of the amount necessary to establish their credit. On competitive systems rates must be the same, otherwise the system having the lower basis of rates will secure the competitive traffic and the condition of the poor roads would be hopeless." Edgar J. Rich, "The Transportation Act of 1920," *American Economic Review*, Vol. X, No. 3 (Sept., 1920), pp. 513-514.

more effective the public efforts, through the medium of the rule of rate-making, to limit the financial return of the transportation agencies, and would operate, along with the policy of unification, to solve in large measure the problem of the strong and weak roads. These ends could be accomplished through Congressional declaration that all earnings on the accepted valuation of the property of any carrier in excess of the rate of return specified by the Commission be held in trust for the Federal Government, such amount to be promptly turned over to the Commission and administered by it for the benefit of the general transportation service. But such complete confiscation of excess earnings would deprive the prosperous roads of all reward for unusual efficiency. Since superiority of management generally constitutes one of the sources of surplus gain, it is desirable that a premium, over and above a fair return on investment or other recognized value, be allowed to the companies achieving exceptional success in the operation of their properties. In order that the stimulus to private initiative and operating efficiency be conserved, a portion of the excess earnings thus emerging—such portion only as is necessary to provide a reasonable incentive to such initiative and efficiency—should properly accrue to the carriers responsible for their realization. Two funds would thus be created out of the excess earnings of the more prosperous roads—one, belonging to the individual carriers, which might be utilized as a reserve for contingencies and for additions and betterments; the other, belonging to the general public, which might be available, as administered by the Commission, for loans to such carriers as are unable, independently, to maintain a satisfactory credit position, and for the purchase and lease of equipment. Through such means the entire flow of excess earnings would in effect be placed at the disposal of the common transportation needs. Both the recapture of excess earnings and their administration in the general interest would constitute a clear recognition of the essentially public character of the railroad function and of the status of the

carriers as mere agents for the performance of public transportation tasks.

In the course of the intensive discussion of the railroad problem during the past few years, the question of the constitutional validity of such excess earnings arrangements as have been described above has received frequent consideration. The legality of the proposal has been both defended and denied by eminent authorities. Since, as we shall see in a subsequent chapter, the Transportation Act of 1920 actually incorporated provisions for the recapture of a portion of the excess earnings of the strong roads to be used in providing credit and facilities for the weak roads, the United States Supreme Court will eventually determine the question of constitutionality. It is interesting to note, however, that the argument against the validity of the expedient largely rests on technical legal considerations. In view of the fact, it is argued, that nothing in this type of rate-making proposal guarantees any fixed return to the individual carriers, the deflection of part of the earnings of one road for the benefit of some other road, or of the general transportation service, constitutes confiscation without due process of law. Such public disposition of operating income actually realized by private carriers cannot be justified on general contractual grounds, since the Government promises to the roads nothing beyond a reasonable rate level, to which they are lawfully entitled under any circumstances; it cannot be justified as a consideration for franchise privileges, since the roads are already vested with these privileges through state grants; and it cannot be justified as a tax, since it is not levied on all the carriers, nor in accordance with any accepted principle of taxation. Moreover, it is further argued, since in many cases the rates which contribute to these excess earnings will have been individually investigated and approved, or prescribed as reasonable, by public authority, the recapture of any portion of such earnings would involve confiscation by the Government of the proceeds of rates that had legally been declared reasonable. This

policy, then, would constitute an arbitrary exercise of the power to regulate interstate commerce. Differences of opinion are possible even as to these considerations. But it is believed that the validity of the proposal may be upheld independently of the juristic reasoning here involved. Federal authority to regulate railroad rates is unquestioned and plenary, and its duty does not extend beyond allowing a fair return on the accepted value of the railroad property, but competitive rates must necessarily be uniform, and such uniformity inevitably leads to excess earnings for some of the carriers; the public, therefore, is equitably entitled to such earnings as exceed a fair return, and it is desirable that the public claim be made effective; the recapture of excess earnings, then, and their devotion to the public use in the transportation service, is but a device appropriate for the attainment of a socially desirable end. It is not unlikely that the pressure of public need and social expediency will outweigh the influence of such technical difficulties as may be encountered. The vitality of a system of law depends upon its capacity to harmonize legal rules with the pressing demands of sound social and economic doctrine.

CHAPTER IX

RAILROAD LABOR AND CONTINUITY OF OPERATION

Traditionally, our treatment in the preceding three chapters of the question of railroad nationalization, and, under regulated private management, of unification, service, rates, credit, capitalization, and operating income, would have concluded the constructive discussion of the essential elements of the railroad problem. These aspects of railroad relationships have been crystallized into public policy because of their influence upon the interests of the carriers and of the users of the transportation service—interests which have been recognized for many decades to be of vital public concern and entitled to appropriate public protection. But the interest of the large body of transportation workers has been almost entirely neglected in the past, both in the analyses of students of railroad economics and in the activities of governmental authorities. Not until the ability of railroad labor to interrupt the continuity of the transportation service had been widely recognized, and its power to enforce its demands clearly demonstrated, was any serious cognizance taken of the railroad labor problem.

In recent years, however, the question of labor relationships has been discovered to constitute an integral element in any sound railroad adjustment. The Great War merely emphasized the already existing necessity of incorporating a railroad labor policy into the regulatory scheme. The recognition of the possibility of disastrous interruption of the service had led, even prior to the war, to halting attempts by the Federal Government to meet the situation. Indeed, the fear of the economic

catastrophe that might result from a nation-wide railroad strike approached the dimensions of popular panic in the days immediately preceding the passage of the Adamson Act in 1916. Then came the war. The patriotic appeal of the national emergency, and the equitable and conciliatory attitude of the United States Railroad Administration, averted serious interference with the continuity of the service. During the course of the military conflict, however, the power of the laboring groups—more strikingly, perhaps, in the transportation industry than in other industrial undertakings—was vastly augmented, and the close of the war saw railroad labor so firmly established in strategic influence as to render its distinctive status in the railroad problem impossible of further neglect. Entirely apart from the question of the justice of their claims, the sheer power of the transportation workers, and of their organizations, has forced the railroad labor problem into public attention, has kept it there, and must render its consideration an integral part of the process of railroad regulation.

§1. *The Significance of the Railroad Labor Problem*

The difficulties arising in the adjustment of the relationship of railroad employees to the carriers and to the public are basically only a special manifestation of the general labor problem. This labor problem is neither a new nor a transient phenomenon. In essence it is part of the eternal struggle for progressively improved adjustments among the complex of interests that constitute the social order. Its genesis is to be found in the emergence of a distinct laboring class, and its beginnings can be traced to the economic developments of the industrial revolution. The new industrialism of the late eighteenth and early nineteenth century inaugurated modern capitalism, introducing the factory system of production and the method of large-scale enterprise, sharpening the line of demarcation between employer and employee, establishing the background for the development of the present-day laboring class,

and thus creating the roots of the current labor problem. In the course of time the laborer became exclusively dependent on employment for his livelihood and upon his employer for both, and was subjected, in increasing measure, to economic domination from above. And in the absence of restraining legislation, or adequate organized effort by the laborers themselves, the well-known evils of the wage system of the middle of the nineteenth century rapidly emerged. The struggle which has followed, in the entire industrial field no less than in the railroad industry, involves directly the interests of labor, of management, and of the public.

From the standpoint of labor, the objective has often been crudely defined as "less work and more pay." That the vast body of wage-earners feel acutely that they are not receiving their due share of the product of industry, and that the demand for shorter hours is practically universal, cannot be gainsaid. These two items comprehend, substantially, the bulk of the purely material and tangible aspirations of American labor. Most of the policies and expedients, even of the organized workers, are but a mechanism for the attainment of these ends. But underlying these aspirations, and coming to the surface with increasing persistence in the recent past, is a less tangible, but more basic, ideal. The demands of labor are beginning to probe into the foundations of the present economic order, and to seek vital change in the very basis upon which existing industrial relationships have been reared. These demands have frequently been characterized as a struggle for "industrial democracy."

That the American laboring classes, possessed of more than a century's heritage of political freedom, should seek to assume a greater degree of control and responsibility in industrial management, at least in so far as their own lives and fortunes are involved, is but a natural step in the gradual rise of the wage-earning groups. The "democratization of industry" is regarded, both by the intelligent laborer and by the leaders of the labor movement, as an indispensable process

for the complete emancipation of the wage-earner. The free operation of the competitive principle in the adjustment of relationships between employers and employees has given rise to innumerable evils which have worked such great hardship on individuals and have produced such grave social maladjustments, that the stream of protest and the effort toward reform have not been confined to the laboring classes. Instability of employment, insufficiency of wage-income for decent living, unreasonable prolongation of the hours of service, ruthless disregard of the demands of health and safety in working environment, irresponsible exploitation of women and children —these are the more glaring abuses that have accompanied the rapid development of the traditional capitalistic system of production. The amelioration of these conditions, in so far as the past efforts of organized labor, or of enlightened employers, or of government have failed to accomplish satisfactory adjustments, constitutes the immediate program of the labor movement. But the demand for industrial democracy comprehends all the elements of this program—due recognition being given to the fact that specific evils require specific remedies—and represents, in addition, the more fundamental desire of the wage-earning classes to secure full rights of citizenship in the industrial world.

The interest of the employer—or of management—in the labor problem is no less vital than that of the wage-earner. The management, in most instances, strives to maintain the *status quo,* in its struggle with labor, provided this purpose can be accomplished without serious interruption of the continuity of the productive process. The employer deems himself under constant pressure to withstand the encroachments of the labor force—intensified, in recent years, by the growth of labor organization and the progressive reliance upon collective action—and to conserve the industrial "rights" which he conceives to be inherently his own. Above all, he is impressed with the necessity of "running his own business," in order that wages, hours, and working conditions may be so adjusted as to create

no obstacles to the realization of "adequate" profits, and so that the necessary control and discipline may be exercised to maintain productive efficiency. But he is eager to avoid open conflict—both strikes and lockouts being very costly as well as demoralizing—unless a policy of conciliation involves yielding what he regards as unreasonable material concessions or dangerous strategic advantages to the labor forces opposing him. Management tends to consider the labor problem primarily from the standpoint of private profit. Nor is this attitude entirely undesirable. It is the legitimate function of management, under our prevailing economic institutions, to concern itself chiefly with increasing output and reducing costs; and the profit motive, under competitive conditions, merely serves as a mechanism for the exercise of this function. For this reason there is a measurable degree of coincidence between the attitude of employers and the attitude of consumers toward the demands of labor. But the insistence of management upon retention of complete control of industrial relationships has frequently led to the reduction of costs, not through increased efficiency, but through unreasonable depression of the wage level and general exploitation of the labor element.

The public interest in labor relationships is paramount, however, and is vitally jeopardized by undue domination of either employers or employees. The costly disruption of the productive process which generally accompanies industrial warfare constitutes the most direct and most tangible evidence of public detriment from labor maladjustments. But even in the absence of actual strikes and lockouts, the discontent of labor because of unreasonably low wages and unduly harsh working conditions, or the discouragement of capital because of exorbitant wage levels and arbitrary interference with the details of management, serves alike to impair the effectiveness of the industrial mechanism and to arouse public resentment. The public good has been assumed to lie, therefore, in a solution of the problem that will attain workable justice: as equi-

table as possible a balancing of rights and interests, but at any rate one which will promote the most satisfactory functioning of the productive process. Conscious of this general interest, public opinion has usually condemned that party to every labor controversy—at least when an open rupture has ensued—which has seemed, at the moment, chiefly responsible for idle factories, scarcity of needed commodities, or excessive prices.

This brief characterization of the general labor problem provides an essential background for an intelligent grasp of the railroad labor problem with which we are primarily concerned. In its broad outlines, the problem of labor relationships in the railroad field—especially as regards the interests of the carriers and the workers—does not differ substantially from that encountered in any important enterprise in which the questions of hours and wages and control have come to a sharp issue between employers and employees. But the public significance of the railroad labor problem transcends that of labor relationships in any other field. The character of the transportation function and the conditions under which it is performed in the United States account, very largely, for the distinctive importance of the problem of railroad labor.

In the first place, the mere size of the industry, and the magnitude of the forces opposing each other, tend to give the labor problem of the carriers a national significance. The American railroads employ, in normal times, approximately two million men. The capital entrusted to their managers approaches twenty billions of dollars. The railroad employees, as we shall see later, have gradually realized the unity of their interests and the necessity of collective action in all matters touching their economic welfare. Similarly, the railroad companies have recognized the desirability, in face of the growing concentration of labor power, of resorting to coöperation in their dealings with labor. The enormous scope and tremendous influence, therefore, of every important conflict between these two great forces become readily apparent. Only a gen-

eral strike could prove more far-reaching than the interruption of the railroad service through serious disagreement between the carriers and their employees.

But the special significance of the railroad labor problem does not arise merely from the extensive power of the combatants. The carriers are engaged in the performance of a public function. The social and economic importance of this function in the modern world can not be overstated. The uninterrupted flow of the transportation service is indispensable to industrial activity and commercial intercourse. Without raw materials and foodstuffs the wheels of our highly specialized economic system would cease to operate. A prolonged discontinuance of railway transport might lead to famine and death in the great centers of population. Many huge modern industries might be discontinued for months, with no greater harm than the loss of profits to those who own them and of wages to those who serve them, together with such public inconvenience as might flow from the necessity of resorting to temporary substitutes for the goods or services involved. But there is no adequate substitute for the railroad. The combined carrying capacity of all other existing transportation agencies could not assume the normal traffic burden of the railroad. Its service is indispensable.

There is a distinctive public interest, then, in the maintenance of the continuity of railroad operation, and hence a special need for public control of railroad labor relationships as part of the regulatory process. While it is desirable that all industrial conflict be reduced to a minimum, and that such labor disputes as cannot be avoided be settled as justly and as promptly as possible, there is an urgent public necessity for such an adjustment of labor relationships in the field of railroad transportation. Under the pre-war system of railroad regulation disruption of the service was intermittently threatened. The degree of organization, on both sides, that has rendered the struggle between the carriers and the railroad employees national in scope, and has placed the public interest

in such serious jeopardy, is the result of a long process of historical development which will be traced in subsequent pages. But the necessity of constructive public action, through the extension of the normal field of regulatory activity to labor relationships, should now be clear.

§2. *The Development of Railroad Labor Organization*

The inadequacy of our traditional public policy toward railroad labor relationships was due in large measure to a failure to evaluate justly the scope and significance of the problem and the real nature of the interests involved. Sound and realistic correctives, therefore, must be sought in an understanding of the historic roots from which the current situation has sprung. The first essential is to trace the development of organization among the railroad employees, and of counter-organization among the railroad corporations, and to note the character of the chief conflicts which stimulated coöperative effort on both sides. The labor movement finds its primary justification in the fact that, with the growth of modern industry and the concentration of capital and of the employing function in relatively few hands, the individual laborer is incapable of securing substantial justice because of the inequality of bargaining power between himself and his employer; and the usual origin and central purpose of labor organizations are to be found in the desire to substitute collective for individual bargaining. Counter-organizations of employers have generally come into being in order that the growing strength of labor resulting from the formation of unified groups of employees might more effectually be met. And the development of organization in both camps has been largely molded by the conflicts of interest, chiefly on the distributive side, and by the open struggles, involving strikes and lockouts, which have arisen from time to time. It is our immediate task to examine the concrete character of these developments in the field of railroad transportation.

There have been in the past, and there are to-day, many organizations of railroad employees; but the four great Brotherhoods stand out with peculiar distinctness. Partly this is due to the emphasis they place on other than strictly trade union functions; partly it is due to their relative isolation from other labor organizations (they have never affiliated, for example, with the American Federation of Labor); and in some measure it is the result of their marked conservatism, the general intelligence of their membership, and the high caliber of their leadership. In the main, however, the four Brotherhoods are distinguished from other unions of railroad employees because of their predominant strength and influence, toward which, without doubt, all of the above factors have contributed.[1]

No one of the four Brotherhoods antedates the period of the Civil War. The Brotherhood of Locomotive Engineers, the first to be organized, came into existence during the war, in 1863. The organization of the engineers was followed, in 1868, by that of the conductors into the Order of Railroad Conductors of America. The Brotherhood of Locomotive Firemen and Enginemen was formed in 1873, and in 1883 the fourth of these organizations, the Brotherhood of Railway Trainmen, was created.[2] While these four organizations are entirely separate and distinct, and considerable friction has even existed between them at various times, their past growth and present policies are fundamentally similar. All of them were originally organized as mutual insurance associations, and much of their present strength is due to the favorable insurance terms they are able to give their members—men engaged in an "extra-hazardous" occupation, to whom insurance at feasible rates is a necessity—and to the uniformly sound financial management of the insurance funds entrusted

[1] *Cf.* R. H. Hoxie, *Trade Unionism in the United States*, pp. 111-112.

[2] All of the four Brotherhoods passed through reorganization at one time or another. The names given are those in use at the present time.

to them. But a persistent demand for the addition of strictly trade union features—the negotiation of wage and working agreements with the carriers through collective bargaining—early made itself felt; and in spite of the opposition of the more conservative members and of the railroad officials, the new functions were gradually assumed. The conductors were most hesitant in adopting such measures. At the very beginning they declared themselves against strikes, and in 1877 they went so far as to forbid individual members to strike under pain of expulsion. Strike-breaking was even encouraged and help was given the roads against other unions. It was anticipated that such a policy would secure the good-will of the carriers; but its outcome was to alienate many of the members of the order, to arouse the opposition of other brotherhoods, and to precipitate the formation of a rival order, which seriously threatened the prestige and very existence of the established organization of conductors. The railroads, in the meantime, failed to make fine distinctions, and their hostile attitude remained unchanged. In 1890, therefore, the policy of "protection" was definitely adopted, and after consolidation with the rival order in 1893, a firm foundation was laid for the subsequent growth of the Order of Railroad Conductors. In like manner, the firemen, after an unsuccessful trial of collective bargaining in 1879, at which time the opposition of the roads made it impracticable, finally reintroduced it as an integral part of their policy in 1885. The other two organizations—the engineers and the trainmen—had shown less hesitancy in assuming trade union functions almost from the outset. Beginning, then, as insurance associations, the Brotherhoods possessed the strength of established institutions before they attempted to deal with the roads, and the development of their insurance business has given a more conservative cast to their labor policies than that of any other group of American unions. The fiduciary responsibility of administering millions of dollars of investment funds has not been calculated to encourage radicalism in their leadership. While they have always striven,

therefore, to improve the lot of their members through reductions in hours, increases in wages, and betterment of working conditions, they have generally deprecated the use of the strike, and have maintained an unusual degree of independence of other labor organizations.

It is a notable feature of the history of the great Brotherhoods that they received recognition as representatives of the workers, established the principle of collective bargaining, and helped to eliminate the most glaring abuses of early railroading, with remarkably infrequent resort to actual strikes. In 1888 a serious conflict occurred between the engineers and the Burlington, in which the road was successful, but no important strike has since been engaged in by this organization. The conductors have been almost equally conservative—such strikes as have been called being largely confined to small and unimportant lines, and only one of them, the Grand Trunk strike of 1910, even threatening to become extensive or serious. The two younger organizations have been only somewhat less moderate in their policies and methods, and all the Brotherhoods have placed much greater dependence upon the power of the threat to strike, than upon the execution of it. The success of the Brotherhoods, in spite of this sparing use of the strike weapon, arises from the extent and character of their membership and the special circumstances surrounding the railroad industry. The men are skilled and not easy to replace; they are indispensable to the performance of a service which cannot be interrupted without tremendous loss and untold hardship; and about 90 per cent. of the workers in the four fields are affiliated with these organizations. Under these circumstances the carriers, especially in recent years, have repeatedly found themselves compelled to yield to the claims of the unions or to consent to arbitration—a policy generally favored by the Brotherhoods—and strikes have been thereby averted. By the end of the century much had been achieved. The railroad unions, and the principle of collective bargaining, were widely recognized by the carriers. Working agreements and uniform

schedules of wages were in force on most roads. The rule of seniority in promotions had been generally accepted. The ten-hour day had become universal. The most striking abuses of the old order of railroading had thus been eliminated.[3] The chief remaining tasks, as conceived by the Brotherhoods, were to broaden the field of standardization from the several divisions of a single system to groups of roads and, eventually, to the country as a whole; to introduce the eight-hour day; and to secure more favorable wage adjustments.[4]

[3] *Cf.* W. J. Cunningham, "Locomotive Engineers Arbitration," *Quarterly Journal of Economics*, Vol. 27 (Feb., 1913), pp. 268-269.

[4] In order that the main currents of labor development may be clear, the principal discussion has been limited to the four great Brotherhoods. But there are many other railroad labor organizations. The Order of Railroad Telegraphers occupies a somewhat intermediate position between the four dominant organizations and the railroad shop-craft unions. It was organized later than the great Brotherhoods, in 1886, and in spite of its membership of more than 48,000 men, it has never attained a like position of influence. It is affiliated with the American Federation of Labor; it is somewhat less conservative in tendency; it has been engaged in many strikes; and it has not always enjoyed peace within its own ranks. All the minor unions, with one exception, may be classed as shop unions, and their members do not occupy the distinctive position in the railroad service occupied by the organizations of laborers engaged in the actual movement of trains. This exception is the Switchmen's Union, a rival of the Brotherhood of Railroad Trainmen, with a membership of about 14,000. Its prestige is small, and it seems to possess a faculty for engaging in unwise and unsuccessful strikes. The remaining organizations are connected with the various crafts involved in the maintenance of railway plant and facilities and the provision of the transportation service, and all are affiliated with the American Federation of Labor. There are also a number of the national unions of such workers as electricians, blacksmiths, machinists, and so on, which have a considerable membership of railroad laborers.

Aside from the character of their policies and leadership, the extent of the membership of the various railroad labor organizations exerts the greatest influence upon their strength. Accordingly, there is added a table giving the more important railroad labor organizations and their membership for 1920, as estimated in Bulletin No. 25 of the Harvard Bureau of Business Research ("Labor Terminology," pp. 65-67), and also such figures as are available, from various sources, for the year 1914, in order that the growth of these organizations during the war period may be noted. In addition, figures are given for five of the important national organizations with which railroad workers are affiliated, although the percentage of their membership engaged in railway service is not available: (Table follows on next page.)

But the present power of the railroad labor organizations, including the less important unions of railroad employees as well as the Brotherhoods, must be attributed in no small measure to the growth of federation and informal coöperation among them. There have been many attempts at formal federation of the various unions, and even at wholesale amalgamation into all-inclusive industrial groups. In their early days the Brotherhoods faced serious competition from the powerful Knights of Labor. This organization, created in 1869, soon avowed the optimistic purpose of bringing the whole of labor within its ranks and improving the conditions of the unskilled

MEMBERSHIP OF RAILROAD LABOR ORGANIZATIONS

	1914*	1920
"Big Four" Brotherhoods:		
Brotherhood of Locomotive Engineers	73,800	86,697
Brotherhood of Locomotive Firemen and Enginemen	86,800	125,862
Brotherhood of Railway Trainmen	126,100	184,500
Order of Railroad Conductors of America	49,100	56,000
Other Railroad Unions:		
The Order of Railroad Telegraphers	25,000	48,700
Brotherhood of Railway Carmen of America	28,700	182,100
United Brotherhood of Maintenance of Way Employees and Railway Shop Laborers	—	154,060
Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees	—	18,600
Switchmen's Union of North America	9,800	14,000
Brotherhood of Railway Signalmen of America	700	12,300
Order of Railroad Station Agents	1,100	9,000
Brotherhood of Railroad Patrolmen	—	2,600
Order of Sleeping Car Conductors	—	1,200
General National Unions:		
International Association of Machinists	75,400	330,800
International Brotherhood of Electrical Workers of America	30,800	139,000
International Brotherhood of Boiler Makers and Iron Ship Builders and Helpers of America	16,700	103,000
International Brotherhood of Blacksmiths, Drop Forgers and Helpers	9,600	48,300
Amalgamated Sheet Metal Workers' International Alliance	17,800	21,800

* These figures are taken from George E. Barnett, "Growth of Labor Organization in the United States, 1897-1914," *Quarterly Journal of Economics*, Vol. XXX, No. 4 (August, 1916), pp. 780-795; Appendix, p. 838 *et seq.*; and the *American Labor Year Book, 1919-1920*, pp. 147-149.

workers *en masse*. This policy, diametrically opposed to that of the trade unions, produced a bitter rivalry between the two types of organization. While the unions, and the newly formed railway unions among them, lost some ground for a time, the prosperity of the Knights of Labor was short-lived. It became a real power only after 1882; and from 1886 its decline was rapid. A second attempt at labor organization on a broader scale than that of the trade union, which directly involved railroad workers and actually threatened the existence of the Brotherhoods, was made in 1893 by the American Railway Union. This organization, largely inspired by Eugene V. Debs, was formed with the avowed purpose of combining all railroad employees into one gigantic union, and had a brief but tremendous history. Within a single year some 150,000 men had been organized, and a successful strike conducted against the Great Northern. Then came the great Chicago strike of 1894, an outgrowth of a strike at the Pullman plant, that soon affected all the railroads radiating out of Chicago and practically the entire membership of the American Railway Union. There was a period of disrupted service; riots ensued; and finally state and federal troops intervened. The result was failure for the strikers and destruction to their organization. Effectively, therefore, one year covers the entire history of this attempt at industrial unionism in the railroad field. After this disastrous experiment, efforts to secure greater unity among railroad employees proceeded more modestly. The American Federation of Labor has been the most important agency of coöperation. All of the railroad labor unions except the four Brotherhoods are members of the Federation, the unifying influence of its loosely-centralized authority being enhanced in recent years by the adoption of the departmental plan of organization. Its Railway Employees Department constitutes the immediate source of unification. This department, organized in 1909, is designed to lend greater uniformity to the policies and activities of the various organizations, to settle disputes between them—particularly those arising out of juris-

dictional difficulties—and to facilitate combined action against the carriers when deemed necessary and expedient. The lesser railroad unions, as thus united through federation, have achieved considerable power and influence.

But the four great Brotherhoods have always been, and give every promise of remaining, the center of the labor movement in the railroad industry. All progress toward federation or amalgamation, therefore, that does not comprehend their activities falls far short of achieving effective results. One of the important objects of the creation of the Railway Employees Department of the American Federation of Labor was to attract the Brotherhoods into that organization; and while the efforts of the Federation to accomplish this end have been continued, and have at times, especially in 1916, received serious consideration, they have thus far been without success. Attempts to bring about coöperative action between the Brotherhoods date back as far as 1889. In that year an abortive effort was made formally to federate the several organizations of men in the train service into the United Order of Railway Employees. The plan was to constitute this order a super-organization relative to the Brotherhoods, with power to negotiate for all the groups of employees and to call strikes if deemed necessary. As a result of internal conflict this body was dissolved in 1891. The necessary basis of mutual confidence and common interest had not yet been sufficiently developed to support such a plan of federation. In lieu of it a scheme of system coöperation, by which federative committees could be formed from the locals of individual systems as found desirable, was put into force in 1893 under the name of the Cedar Rapids Plan. But since problems more general than those of a single system continued to press for consideration, this scheme was abandoned in 1897, and another attempt at more comprehensive federation was made. But the new Federation of American Railway Employees was likewise destroyed through mutual distrust, and resort was had once more

to temporary agreements between two or more of the organizations for dealing with the individual roads.

But while the formal types of federation found little success with the Brotherhoods, the value and the need of unity of action were clearly recognized. Especially after 1900, when the accomplished standardization of rates of pay enabled individual carriers to withstand wage demands by reference to the exigencies of the competitive situation, it became more and more apparent that wage schedules could be raised effectively only through unified negotiation and concerted action. This situation stimulated the development of informal coöperation between the Brotherhoods, whereby the influence of each organization began to be exerted on a broader scale, and the demands of the various groups of employees engaged in train service came to be supported by a measurable degree of joint effort. Associations were formed for specified territories, representing all the men of a single brotherhood within each of the territories, which presented similar demands and petitions to all the roads within the given area; and joint committees—local and ultimately national in scope—were likewise formed, representing the membership of two or more of the Brotherhoods, and applying the weight of their combined influence toward the enforcement of demands upon the carriers. This development—a phenomenon, very largely, of the decade between 1906 and 1916—has had significant consequences. It pointed the way to a workable means of coöperation between the Brotherhoods, without permanently destroying their independence of each other and of the remaining railroad labor organizations. It forced the policy of counter-organization upon the railroads, so that their negotiations also came to be conducted through sectional and national representatives—these representatives being temporarily chosen for particular occasions or consisting of committees from one or another of the associations of railroad officials. Finally, it led to the important series of sectional wage advances which substantially bettered the situation of the men concerned and directed public

attention to the bitter and disruptive controversies involved. Under these circumstances, the scope of the railroad labor problem was so extended, between 1906 and 1916, as to include practically all the carriers and essential transportation workers, and thus to involve the vital interest of the entire country.

It is beyond the scope of our present task to present more than a brief outline of the chief conflicts of this series of wage controversies. The inception of the new movement dates back to the early years of the century. In 1902 the conductors presented demands to most of the roads in western territory, and induced the lines to conduct their negotiations jointly. There were many proposals and counter-proposals, the trainmen finally entering into the controversy in support of the conductors; and the matter was settled favorably to the unions. This was the beginning. Very soon thereafter all of the four Brotherhoods adopted a division of the country into three regions—the eastern, the western, and the southern, corresponding to the grouping of the roads employed by the Interstate Commerce Commission—and began to prepare for the joint submission of demands to all the lines in each of these regions, for the purpose of increasing wages, improving working rules, and standardizing conditions in each territory.

The first notable wage movement thus organized was carried out by a joint committee of the conductors and trainmen, again in western territory, in 1907. The scope of the demands included all the roads, involving 101,500 miles of line and 42,500 employees. The carriers took the demands under consideration through a joint committee of the managers of the 38 roads affected. The contending parties failed to reach agreement, and the controversy was submitted to mediation under the Erdman Act (to be explained in subsequent pages), through which a settlement, largely favorable to the employees, was finally effected. As a result of the business depression of 1907, no further important development occurred until 1910. In that year the firemen began operations in western, and the con-

ductors and trainmen in eastern, territory. The firemen, through the process of negotiation, mediation, and compromise, succeeded in some measure; but in the east the situation proved more complex. There the roads refused to deal collectively through their General Managers Association, and the unions were forced to submit their demands to individual carriers. Wage advances were requested from the Baltimore and Ohio, by way of test, and upon the refusal of its management to grant them, strike proceedings were begun. At this crisis the road carried the matter to the Federal Mediation Board, and through its efforts a compromise favorable to the men was accepted. Within a short time similarly favorable concessions were obtained from the other roads; for the carriers found it expedient to agree that all would accept the results of an arbitration proceeding arising out of the union demands upon the New York Central which came to successful issue for the employees. In this way the method of concerted action became generally established, the engineers and firemen, who had been dealing with individual corporations in the east, likewise adopting the policy of submitting their demands to groups of carriers.

One of the most significant of these conflicts, prior to 1916, arose out of the wage demands of the engineers in eastern territory in 1911, following their successful negotiations in the west. In December of that year the Brotherhood presented petitions to all eastern roads for an increase in wages and for the standardization of rates of pay. The General Managers Association of New York, representing the roads, rejected the demands, and no compromise could be agreed upon through conference. Moreover, the railway managers refused to arbitrate the controversy under the Erdman Act, on the ground that three individuals, only one of whom represented the public, were incapable of rendering a satisfactory decision in so important an issue. As an alternative the roads suggested reference of the matter to the Interstate Commerce Commission; but this solution was acceptable neither to the engineers

nor to the Commission, and a strike seemed imminent. At this juncture the Mediation Board offered its services, through which arbitration by a body of seven, consisting of one representative of each of the parties and of five other persons appointed by the mediators and the Chief Justice of the Supreme Court, was finally accepted. The findings of this arbitration board were distinctly unfavorable to the engineers, and to the interests of organized labor. The men were granted a minimum wage, but the proposed wage increases and standardization were denied them. Moreover, the majority report of the board advocated the compulsory adjustment of wages by a public tribunal and the denial to railroad labor of the right to strike. The outcome of this controversy was not without unfortunate consequences; for it exerted a direct influence upon the character of the supreme struggle that preceded the passage of the Adamson Act in 1916—a struggle involving concerted action by both carriers and employees on the largest scale, and setting in motion the entire machinery of the Federal Government before a settlement could be effectuated.

Late in 1915 the Brotherhoods agreed that the time was ripe for a national eight-hour day. In January of the following year a conference of representatives of the four organizations drew up a proposal for an eight-hour day (and for time and a half for over-time), secured its adoption by their respective memberships, and presented it to practically all the railroads in the United States. The carriers, acting through a National Conference Committee, suggested the submission of the proposal to arbitration; but the Brotherhoods, remembering the results of the engineers' arbitration of 1912 and alleging past unfairness, declined to accept this basis of settlement. The negotiations were continued, but every plan of compromise, mediation, or arbitration was rejected by one or the other of the parties. When the efforts of President Wilson, through personal conference, failed to result in agreement—his proposal that the demands of the men be temporarily granted and their influence upon labor cost definitely ascertained was rejected by the car-

riers—a national strike was called for Labor Day, 1916. The country was aroused. The intention of the Brotherhoods was clear, and the nation seemed face to face with what would probably have proved the most disastrous strike in our entire industrial history. The seriousness of this situation, coupled with the delicate character of our international relationships growing out of the European war, led President Wilson to seek a solution through legislative enactment. At the earnest request of the President, the Adamson bill, embodying the demand of the Brotherhoods for the eight-hour day, was introduced into the House of Representatives on the last day of August, and within three days was enacted into law.

The great strike was thereby averted, and the public experienced intense relief; but the country was deeply incensed at the precipitate action which had been forced upon Congress. In view of the methods employed, this resentment—directed primarily at the "brazenness" of the Brotherhoods and the "timidity" of Congress—was in no small measure justified. It should be remembered, however, that the attitude of the carriers, as well as of the employees, was rather uncompromising. And in view of the gravity of the situation, it is hard to determine what effective alternative was available for the national legislature. The source of the difficulty was more deeply rooted. It consisted, fundamentally, in the virtual neglect of the question of labor relationships in the development of the regulative process, and in the absence of appropriate machinery for the settlement of disputes between the carriers and their employees.

The important developments following the passage of the Adamson Act can be stated very briefly. While the constitutionality of the new law was being challenged in the courts, the roads manifested a tendency to evade its application. In March, 1917, therefore, the Brotherhoods threatened to reissue their strike call unless the provisions of the act were enforced by the carriers, and its constitutionality promptly upheld by the Supreme Court. But American participation in the Great War was imminent, and President Wilson induced the rail-

roads and the Brotherhoods to submit their difficulty to a committee of the Council of National Defense. As a result of this mediation, the carriers agreed to the demands of the workers, the Supreme Court's decision upholding the constitutionality of the statute being delivered the very day on which agreement was reached.[5]

§3. *Public Policy Toward Railroad Labor Relationships*

The single dispute that led to the abrupt passing of the Adamson Act provides the most striking example of the way in which labor conflicts may jeopardize the public welfare, and of the expedients that may be resorted to in order to adjust private controversies. The events of the fall of 1916 clearly showed that existing public machinery for the settlement of such disputes was hopelessly inadequate. In order that the specific shortcomings may be intelligently understood, it will be necessary to trace briefly the development of public policy toward railroad labor relationships.

The first legislative recognition of the problem appeared in the Arbitration Act of 1888. It was the outcome of the public apprehension that had been aroused as early as 1877—as a result of the great strike of that year, with its riots, and crime, and destruction of property—and of the emergence of a conscious public interest in industrial relationships that marked

[5] One of the features of the controversy which especially aroused public animus was the general belief that the proposal of the Brotherhoods for an eight-hour day was essentially a disguised wage measure, rather than a frank demand for shorter hours. This was also the principal legal issue in the question of constitutionality. It was admitted by representatives of the Brotherhoods that operating exigencies would probably prevent the reduction of hours in most instances. The Eight Hour Commission, created by the Adamson Act to determine its effects, reported that the hours of actual service were not substantially reduced as a result of the operation of the measure. Eight hours was merely accepted as the legal basis for a day's pay, with the result that those serving the usual ten hours were entitled to two hours' additional compensation per day as overtime. It was this aspect of the question, together with the resentment at the pressure exerted upon the governmental authorities, that was chiefly responsible for the public denunciations of the Brotherhoods.

the decade of the eighties. The chief contribution of this measure lay in its recognition of the problem; its machinery was never utilized in the settlement of disputes. It provided for voluntary arbitration: in the event of a controversy either party might suggest arbitration; if there was agreement to arbitrate, a board would be organized consisting of one representative of each of the parties and of a "neutral" selected by these two; and this board would investigate the difficulty and make an award, the decision to be enforced, if at all, through the pressure of public opinion. Under this act, however, there was, impliedly, compulsory investigation of labor disputes. Either the parties to the controversy, or a state executive, or the President of the United States might institute an investigation, to be conducted by a commission of three appointed by the President; and its findings were to be given due publicity. Only one such commission was created, which investigated the Chicago railroad strike of 1894. But since it came into being after the strike had been broken, its report dealt chiefly with suggestions for a better type of legislation rather than with the merits of the controversy. "The arbitration act of 1888," it has been justly said, "was clearly in advance of the spirit of the times, and remained a dead letter as far as the settlement of any dispute was concerned." [6]

The Erdman Act of 1898 constitutes a more significant attempt by the Federal Government to provide for public intervention in railroad labor controversies. The passage of the new law was prompted by the failure of the old, and introduced the new principle of mediation, in addition to retaining the former policy of arbitration. The Erdman Act was limited in its jurisdiction to disputes involving railway employees engaged in actually operating trains. In the event of a dispute between an interstate carrier and any group of such employees, either party might request the aid of federal mediators, consisting of the Commissioner of Labor and the Chairman of

[6] Magnusson and Gadsby, "Federal Intervention in Railroad Disputes," *Monthly Labor Review*, Vol. XI, No. 1 (July, 1920), p. 40.

the Interstate Commerce Commission. Upon agreement of the parties, these federal mediators must attempt to conciliate their differences and effect a settlement; and upon failure to adjust the dispute, they must seek to induce the parties to accept arbitration. If arbitration were accepted, a board constituted as under the act of 1888 was to adjudicate the controversy, and the terms of the award might be enforced by either party through equity proceedings. Upon acceptance of the arbitration provisions, the parties were compelled to submit the dispute to investigation, and strike or lockout for three months following the award was made illegal.

While there seemed to be a likelihood, in the beginning, that the provisions of the Erdman Act, because of their voluntary character, might, for practical purposes, lapse through disuse, they were successfully invoked in 1906, and from that time "until the act was superseded there was no serious strike, actual or threatened, in which one of the parties did not seek settlement under its terms."[7] Until 1912, the operation of the act appeared to be uniformly successful. Sixty cases reached settlement, of which 45 were adjusted through the process of mediation and conciliation. Of these cases, a number were of considerable magnitude. The mediation, for example, between the western lines and the conductors and trainmen in 1907, as we have seen earlier, involved 38 roads and 42,500 employees. In the course of time the mediation features of the act, at first deemed incidental, assumed increasing importance, although many of the disputes involving the larger groups of employees went to arbitration. But the method of arbitration encountered grave difficulties. There were few instances in which the partizan representatives could agree upon a third member of the board, and the federal mediators were compelled to make a selection. Moreover, as the scope of the disputes developed, both the Brotherhoods and the carriers became reluctant to entrust the weighty issues involved to a single neutral arbitrator. Finally, in the engineers'

[7] Commons and Andrews, *Principles of Labor Legislation*, p. 140.

wage controversy of 1912, the railroad managers, as we have seen, refused to utilize the mechanism created by law, and secured in its stead a board of seven, consisting of two partizan representatives and five "public" representatives. While the engineers consented to this arrangement, the necessity of resorting to extra-legal machinery emphasized the defects of the Erdman Act and pointed the way to further improvement. The failure of the law in this case was directly responsible for the adoption of the Newlands Act in 1913.

The Newlands Act was virtually an amendment of the earlier statute, designed to remove its more obvious shortcomings. As the problem was then conceived, there were two essential needs: to increase emphasis upon the process of mediation (which appeared from the mere number of cases settled by this means to constitute the more useful part of the program), and to provide for larger arbitration boards (in order to obviate the objections raised by the eastern railroad officials in the engineers' arbitration in 1912). The method of mediation was given greater importance, through the creation of a permanent Board of Mediation and Conciliation, and through the provision that this board might offer its services on its own motion, when deemed desirable in the public interest. The boards of arbitration provided for, in case mediation proved unsuccessful, were to consist of either three or six members, as agreed upon by the contending parties, each party selecting one or two representatives, and these choosing one or two "public" arbitrators. In addition, more extensive restrictions were thrown about the "arbitration agreement" than was the case in the Erdman Act, and many of the details of the arbitration process were made part of the agreement rather than of the law itself. Through such means the machinery of the old law was considerably elaborated, the most significant development consisting in the introduction of a permanent board for the consideration of labor controversies. It is unfortunate that such a board was created only for mediation, and not for the more difficult tasks of arbitration.

During the four and a half years that elapsed between the passage of the Newlands Act and the beginning of Federal Control, the process of mediation and conciliation was invoked no less than 77 times, and 22 disputes were settled by arbitration boards created under the act. There can be no question, therefore, that the law performed a significant service. Many of the controversies adjusted through resort to its agencies would, in the absence of the statute, doubtless have reached the stage of open conflict and disrupted service. But when the crucial test came, the act was found incapable of safeguarding the public interest. Arbitration under its provisions—very largely because the boards were temporary, created in the heat of actual dispute, and merely designed to compromise difficulties—failed to convince the workers of its impartiality; and being voluntary, it finally failed, at a critical time, to win the consent of the workers to its use. The inadequacy of the Newlands Act was forcefully demonstrated in 1916, during the difficult struggle for the eight-hour day. In the face of a national strike, all existing means of settling railroad labor disputes fell to the ground. The Brotherhoods, convinced of the justice of their demands, refused to accede to compromise or to entrust their cause to what they deemed to be an unfair arbitration process. Not until Congress constituted itself an arbitration board and, without investigation, granted the demands of the workers, was the threatened strike averted. Since September, 1916, the Newlands Act has possessed no practical importance.

The inadequacy of all these legislative expedients was the result of a fundamental defect in public policy toward labor relationships. These laws were designed to compromise disputes between the carriers and their employees after the controversies had been fully developed. Provision for the labor interest was not recognized as an integral part of the railroad problem, and no permanent regulative scheme was established to secure just treatment for the transportation workers. The need of removing continuing abuse and thereby preventing the

emergence of serious labor difficulties was entirely neglected. The emphasis of all this legislation was misplaced. If public effort were directed to the establishment of reasonable wages, hours, and working conditions, relatively simple machinery of mediation and arbitration might prove adequate. Under such circumstances, labor disputes would be fewer in number, and the great power of public opinion could be legitimately and effectively utilized against any organization refusing to abide by the legally recognized means of settlement. Public disapproval of unfair demands and arbitrary methods would tend to provide all the compulsion necessary to prevent interruption of the transportation service.

§4. *Railroad Labor under Federal Control*[8]

The final settlement of the eight-hour dispute was accomplished in March, 1917. Our participation in the Great War dates from April of that year. Throughout 1917 events moved rapidly: the formation of armies began to draw skilled workers from the railroads; the prevalence of high wages in the temporary war industries, the inadequacy of the railroad wage level, and the upward trend of living costs were fomenting discontent among the railroad employees; the existing transportation charges, in face of constantly increasing prices of materials and supplies, made wage concessions by the carriers impossible; and yet there had never been a time in the history of American railroads when it was so imperative that an adequate and efficient labor force be maintained. By the end of the year, therefore, the railroad labor situation had again become very grave. In November and December practically all of the more important organizations of railroad employees presented wage demands which the railroads were unable to meet under existing financial conditions. The possibility of a national strike was again on the horizon. These critical circumstances were

[8] The details of the labor policy of the Railroad Administration are set forth in Chapter V, §6.

among the causes of Federal Control; and the labor policies of the United States Railroad Administration made significant contributions to the elements essential for permanent settlement of the problem of labor relationships.

It should be noted, at the outset, that the labor activities of the Railroad Administration are not strictly comparable with those of the governmental agencies of the pre-war period. Under Federal Control the functions of management and of public intervention were fused. All the details of labor relationships were settled by agreement between the Government and the employees; the tasks of the Administration were not confined to its intervention, as a third party, for the adjustment of disputes. In fixing wages, hours, and working conditions, initially, the public authorities were but performing one of the recognized functions of management; for the most part only the activities of the Adjustment Boards may properly be regarded as connected with the conciliation of labor controversies. It must be recognized, however, that in the performance of its managerial functions, the Railroad Administration succeeded to a marked extent in developing friendly relationships between the railroad employees and the government officials; and hence it is difficult to draw a distinct line between the two phases of its labor policy. But the fact of the distinction is obvious, and must receive consideration in any attempt to apply the experience of Federal Control to post-war adjustments.

The labor policy of the Administration in the management of the railroads was distinguished by a sincere desire to accord fair treatment to all the employees in the service. The wage increases, for example, were neither the result of arbitrary determination by the Director-General, nor of compromise with the demands of the men. They were based upon thorough investigation of the facts, and were designed to establish a just level of compensation. In like manner, reasonably satisfactory working conditions were provided from the beginning. The initial wage order accepted the eight-hour day as the basis

of payment, and as soon as the exigencies of war permitted, the eight-hour day was widely instituted in practice, particularly in shop service. Rules defining working conditions were incorporated into agreements—ultimately national in scope—which replaced those operative prior to Federal Control, and were made applicable, in many instances, to groups of workers that had been neglected under private management. While standardization may have been carried too far in these agreements, the policy of instituting improvements in working conditions before they had become the subject of actual dispute, proved very helpful in preventing disruption or demoralization of the service. In the adjustment of these working rules, as in the establishment of machinery of conciliation, the principle of collective bargaining was frankly recognized, the government officials dealing with the representatives of labor.

The chief tasks of conciliation of actual controversies fell to the three Boards of Adjustment; they were the agencies under Federal Control most nearly corresponding to the Board of Mediation and Conciliation created by the Newlands Act. They were bi-partizan bodies, established through agreement between the regional directors of the Railroad Administration and the representatives of the labor organizations, each board having jurisdiction over distinct classes of workers. Up to April 7, 1920, these three Boards of Adjustment had received 4,266 cases for settlement, of which 3,753 had been disposed of: in 1,799 of these cases the decisions were favorable to the carriers; in 1,369 of them they were favorable to the employees; in 121 the disputes were compromised; and 464 of the cases were withdrawn without decision. Though the boards were organized on a bi-partizan basis, there appears to have been little "partizanship" in their disposition of the many difficulties involved in the application of the wage orders and the working rules.

There were no authorized strikes during the entire period of Federal Control. The unauthorized strikes were largely

due to the failure of the employees to recognize the possibilities of the newly created mechanism for the settlement of their difficulties. The most serious of them—the unauthorized strike of the shopmen in Chicago in the summer of 1919—was the direct outcome of the unwillingness of the Railroad Administration to grant further wage increases, however just the demands, pending the restoration of private management. Strikes of this character were promptly suppressed, through the refusal of the Director-General to consider the grievances of the men until work had been resumed, and through the loyalty and support of the leaders of the labor organizations involved.

The success of the agencies of conciliation under Federal Control was due in large measure to the fact that they were permanent boards, composed of experts who merited and received full confidence. The were very properly, also, bi-partizan boards. The very presence of a neutral umpire on such a body presupposes that the partizan members will render partizan decisions. The burden of effecting a just settlement is thus thrown upon the shoulders of a single individual (or, in any case, upon a minority)—and, in the temporary boards, this individual's common lack of special equipment for the tasks involved serves to destroy the confidence of both parties in the conciliation or arbitration process. But the success achieved under Federal Control in the adjustment of labor relationships was due more largely to the provision of fair treatment for the railroad employees, than to the establishment of adequate machinery for the settlement of disputes. The conviction on the part of the men that their interests were being currently safeguarded, and not merely subject to compromise at wide intervals, when vital differences had reached the stage of open conflict, was the primary source of industrial peace during the life of the Railroad Administration. The far-sighted exercise of the functions of management were chiefly instrumental in averting railroad strikes.

§5. *Labor Relationships and Continuity of the Service*

The body of American experience briefly reviewed in the preceding pages—in the development of labor conflicts and public policy under private management, and in the adjustment of labor relationships under government operation—discloses two primary needs: that railroad labor be treated justly; and that the public be freed of the menace of interference with the continuity of the transportation service. The principles and machinery governing labor relationships prior to the war failed to achieve either of these ends. The startling findings of the Lane Commission relative to the level of railroad wages directed attention to the chief source of labor discontent; and the striking episode of the Adamson Act demonstrated the utter inadequacy of the existing governmental agencies for the settlement of railroad labor controversies.

There is little justification for the belief that reasonable labor conditions in the railroad industry can be secured, under private management, without an extension of the scope of public regulation to wages, hours, and working rules. The possibilities of the future must be judged very largely by the results of the past; and the lesson of the past is unmistakable.[9] The carriers have generally yielded to the demands of their employees, whether just or unjust, only when compelled to do so by the application of overwhelming pressure. The signifi-

[9] *Cf.* the following: "Broadly speaking, the old railroad management treated labor as a commodity to be bought in the lowest market and junked when shattered in service. Labor has not, and has no reason to have, confidence in getting a square deal if the railroads are returned to corporations operating them for private profit and dominated by the financial cliques that have of recent years controlled our great railroad systems. For that matter, neither have the security holders. Labor is embittered by generations of ill-treatment and exploitation. The representatives of labor say, and with substantial truth, that the forces which, until December 26, 1917, dominated our transportation industry, are representative neither of the rights of the millions of human beings who have done the essential transportation work, nor of the rights of the other millions who have furnished the money to pay for the transportation facilities." G. W. Anderson, "Our Railroad Problem," *Atlantic Monthly*, December, 1919, pp. 849-850.

cant gains of railroad labor have been won through the power of close organization and concerted action, and in numerous instances, only through actual or threatened interruption of the transportation service. In spite of the tremendous growth of railroad labor organizations and the rapid development of formal and informal coöperation between them, the weapon of the strike has had to be resorted to with increasing frequency in recent years in order to induce the railroad corporations to recognize the interests of the workers. The provision of fair wages and satisfactory working conditions, just as the establishment of reasonable rates and adequate service, is primarily a function of the private managements; but neither task can be accomplished properly without public regulation. Just as the public interest in rates and service transcends that of the railroads and the shippers, so the public interest in labor relationships transcends that of the carriers and their employees.

It is desirable that labor relationships be adjusted in the first instance by agreement between the corporations and the men—the principle of collective bargaining being given unequivocal recognition—but the results of such agreement, and the difficulties arising out of failure to reach agreement, must be subject to the control of public authority. There is need of a Labor Commission—a board governing railroad wages and working conditions—comparable in power and influence to the Interstate Commerce Commission. Such a commission, unlike the boards contemplated by federal legislation of the pre-war period, must be a permanent body in continuous session, expert in personnel and representative of the public as well as the railroad and labor interests, endowed with sufficient authority to deal constructively with the railroad labor problem. The efforts of this agency would be directed to the maintenance of proper relationships between the carriers and their employees, through current adjustment of wages and working rules, when they cannot be satisfactorily determined by the parties in interest, rather than to the mere compromise of difficulties threatening the disruption of the service. The accumulating experi-

ence of such a body would prove increasingly valuable, and its influence and effectiveness might be enhanced through the establishment of field forces (as in the case of the Interstate Commerce Commission) devoted to the investigation of the practical results of its orders and decisions. The work of the national commission could profitably be supplemented, also, by a system of adjustment boards, subsidiary to the commission, similar to those in operation under Federal Control. These boards, of bi-partizan personnel, and limited in jurisdiction to specific classes of employees, would be created through compulsory agreement between the carriers and their organized employees. They would find their chief tasks in conciliating, with reference to individual carriers or particular localities, the minor but rankling labor difficulties that are constantly arising in the management of the railroads. Some such scheme of public regulation of labor relationships would tend to remove the primary causes of conflict at their source—through improvement of conditions of employment and elimination of arbitrary power—and would, at the same time, provide adequate means for the settlement of such controversies as might in any event arise.

But a further, and more fundamental, preventive measure is necessary. If the interests of labor are to be properly safeguarded, the railroad employees must be given a voice in the management of the railroad systems. Labor representation on the directorates of the more important operating companies would constitute a recognition of the vital concern of the transportation workers, along with the owners of the properties and the users of the service, in the proper functioning of the railroad industry. Such representation would minimize labor controversy. Many labor disputes are but the outcome of misunderstanding. The difficulty of reconciling the opposing viewpoints of the workers and the management is often due to the mere isolation from each other of the contending parties. The functions of the labor directors would largely be concerned with the development of mutual understanding and

coöperative effort. Moreover, participation in management would add responsibility to the power of labor. Such responsibility would lead to greater efficiency in the performance of transportation tasks, as well as to greater assurance of uninterrupted railroad service. The establishment of labor representation on the directorates of the carriers would constitute an important step in the democratization of the industry, in the sharing of control by all the elements that contribute to the proper exercise of the transportation function; and this concession to the legitimate aspirations of the workers would tend to discourage such extreme labor demands for industrial control as are contemplated by the Plumb Plan, and would thereby promote the public welfare.

With the interests of labor reasonably safeguarded and adequate machinery of government intervention permanently established, is there need of further public protection against interruption of the transportation service? It has been frequently suggested, and the suggestion has received the approval even of some who are acknowledged to be warmly sympathetic to the cause of labor, that the public stake in maintaining continuity of the service is so basic that railroad strikes must be made illegal. "The first and most obvious economic right and need of the railroad-using public," writes an eminent champion of social justice, "is uninterrupted service. . . . The American public now has no generally accepted *legal* right to continuous service. Otherwise stated, the operating forces have a legal right to strike. . . . The right of the individual employee to leave the railroad service should remain inviolate. But the present legal right of the mass of employees, by combination and conspiracy, to take the country by the throat until it assents to their demands, just or unjust, must be taken away. No people can be really free while their right to a life of peaceful activity lies subject to the control of extra-governmental bodies. Labor unions to-day are extra-governmental bodies. They have the powers, but not the responsibilities, of government. Their domination is as intolerable as the capitalistic 'invisible

government' that we have been fighting for a generation, until the Germans diverted our attention to world affairs. Our dominating forces must be governmental, official. Then, when they do not suit us, we may change them through orderly political processes. Thus only can there be evolutionary democratic progress." [10]

There can be little question that the public interest in the continuity of the transportation service is supreme; that railroad labor organizations possess the power to jeopardize the general welfare in this respect; and that the domination of these "extra-governmental" bodies is antagonistic to the free functioning of our democratic institutions. It is to be remembered, however, that the development of industrial conflict in the field of transportation has been stimulated chiefly by the existence of intolerable maladjustments in labor relationships, and that the strike and threat of strike have proved, in the past, the only effective tools for the advancement of the interests of the workers. Until the traditional labor situation is replaced by one of measurable justice, it would be both unwise and impracticable to deprive the highly organized railroad employees of the legal right to use the strike weapon. Labor distrust in the willingness of the carriers to grant fair wages, hours, and working conditions, and in the ability and determination of government authority to establish such adjustments, must first be removed. The policy of making strikes illegal—to be enforced against large and closely organized bodies of men—might involve the suppression of rebellion, rather than the mere control of recalcitrant citizens, especially when directed against railroad labor "embittered by generations of ill-treatment and exploitation." Sound reconstructive policy, in the field of labor relationships as in financial and operating practice, must necessarily arise out of past conditions. The extension of administrative control to labor relationships, and the creation of permanent agencies for the settlement of dis-

[10] G. W. Anderson, *op. cit.*, pp. 847-848

putes, would constitute an outgrowth of the traditional regulative process, and would provide reasonable public assurance that the continuity of the service will be maintained. Even in the absence of a legally-binding anti-strike policy, or of a system of compulsory arbitration, labor would be subjected to the increasing pressure of public opinion. In the face of continuing public effort to secure just treatment for the railroad employees, serious disputes would be less frequent, and an uncompromising attitude, or an unwillingness to submit to established agencies for the adjustment of difficulties, would be punishable by the full weight of public displeasure. The primary public guarantees against interruption of the transportation service are identical with the guarantees of fair treatment to railroad labor.



PART III

THE ELEMENTS OF THE RAILROAD ADJUSTMENT

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CHAPTER X

THE BACKGROUND OF THE SETTLEMENT

The preceding four chapters, in presenting a discussion of the essentials of reconstructive policy, were in the nature of a digression from the initial task of tracing in chronological sequence the character of recent railroad developments, particularly since the outbreak of the Great War. The salient facts of the war-time operation of the railroads have been set forth, and a judgment has been attempted of the significance of the experience from the standpoint of the war emergency. On March 1, 1920, the roads were restored to private management under a reconstituted system of public regulation. It is the purpose of the chapters that follow to examine and describe the elements of this railroad adjustment. The immediate task is to indicate the background of the settlement. We shall then present an analysis and interpretation of the Transportation Act of 1920.

§1. *The Historic Roots of Maladjustment*

In a very real sense the entire history of railroad transportation in the United States constitutes the background of the new system of regulation introduced by the Transportation Act. Neither the character of railroad maladjustments nor the shortcomings of the old system of public control can be adequately understood without reference to the historic antecedents of existing conditions. In railroad relationships, as in all social and economic arrangements, the process of development—in some measure arbitrary and accidental, but in most

respects grounded in the forces of time and place—discloses the effective roots of both merit and defect in the prevailing situation. The swiftness of American railroad expansion and the speculative nature of early railroad construction, the unfettered individualism in which the new industry was established and the spirit of public approval through which it was initially nurtured, the cautious beginnings of public regulation and the political and legal difficulties encountered in its development, the insistent prosecution of the dictates of self-interest by the carriers and the frequently ill-considered policies enforced by the public authorities—this entire complex of circumstances is ultimately responsible for the serious drawbacks which accompanied the war effort and remained as a heritage for subsequent settlement. All of these matters have received previous consideration in the résumé of American railroad conditions in 1914, and in connection with the analysis of the essentials of reconstructive policy. It is but necessary at this juncture, therefore, to gather the scattered threads, and restate very briefly the character of the railroad shortcomings which preceded the war experience.

The defects of the old system of railroad regulation were partly positive and partly negative. The difficulty, in both respects, arose from a failure to envisage constructively the public function in railroad regulation; public policy was too largely influenced by the character of specific abuses, instead of by the inherent nature and significance of the railroad industry.

With regard to the positive defects, the basic source of difficulty consisted in the public enforcement of the competitive principle in an industry which is naturally monopolistic. The anti-pooling clause of the Act to Regulate Commerce, and the prohibitions of the anti-trust laws as applied to the railroads, prevented the adoption of the various expedients of railroad coöperation between competing lines which are essential to the elimination of rate fluctuations and discriminatory practices, and which provide the necessary basis for the full utilization of transportation plant and equipment. The inadequacy of

the service which has been keenly felt in recent years, particularly under the pressure of the intensive industrial activity accompanying the war effort, and the financial difficulties arising out of the co-existence of strong and weak roads, can be traced in considerable measure to the legally enforced maintenance of the independence of competing transportation lines.

The fact that American railroads have been subject to the dual control of the nation and the states, with conflicting regulations as to rates and service, likewise proved burdensome to the carriers and subversive of the common interest. Unnecessary curtailment of railway income has been the result of the process, together with hampering interference in the domain of management and the technique of operation. This dual form of regulation, especially when its burdens have been accentuated by conflict between state and federal authority, helped to prevent the development of such a national transportation system as the dominantly interstate character of commercial and industrial intercourse urgently demanded.

Finally, the failure of both the national Congress and the state legislatures to enunciate definite principles of rate-making for the financial regulation of the railroads led to what has been widely deemed an unduly restrictive rate policy; and one which did, in fact, contribute substantially to the stoppage of the flow of capital into the railroad industry. There was no clear recognition of the fact that the rate of return which must be provided for the carriers should be directed to the support of railroad credit, under changing money market conditions and in the light of the dynamic character of economic institutions, as well as to the prevention of confiscatory rate adjustments in the narrower sense; and no legislative guide was provided for either commissions or courts as to the standards to be adopted in the determination of the "value" base upon which the rate of return was to be computed. Financial regulation thereby became largely a judicial, rather than a legislative, function, subjecting the carriers to uncertainty as to the extent of their rights, and subjecting the public to the burden of providing a

return on a "fair value" capable of almost indefinite expansion through the progressive acceptance of new speculative elements of value. The necessity of establishing uniform rates for competing lines, and the impossibility of so adjusting these rates as to yield a fair return to the weaker roads without providing excessive earnings for the stronger lines, added to the difficulties of the situation. Through the traditional rate policy, therefore, neither was the interest of the public adequately safeguarded, nor the credit of the railroads sufficiently protected.

But there were also outstanding negative defects. The persistence of competitive operation was not based entirely upon the legal obstacles to coöperative effort. The roads themselves were frequently averse to unification. They desired to retain for themselves, in each case, the financial advantages inherent in the control of strategic locations or essential equipment, regardless of the needs of the general transportation service. Such an attitude was both natural and inevitable under a system of multiple corporate ownership. Its drawbacks could be removed, and the full utilization of carrying capacity could be secured, only through the formulation and enforcement of a public policy directed to the progressive consolidation of railroad systems.

In like manner, the difficulties of financial regulation were not due exclusively to the indefiniteness and restrictive character of the rate policy of the Interstate Commerce Commission and of the state regulatory bodies. The freedom which the carriers had traditionally enjoyed in the capitalization of their railroad systems and in the disposition of the proceeds of their securities had complicated the task of rate regulation, had led to under-maintenance and arrested development of the transportation properties, and resulted in a large measure of financial mismanagement. Public confidence in railroad investment was thereby seriously shaken, and the credit of the carriers dangerously crippled. While the efforts of the states in the regulation of security issues were not altogether fruit-

less, the need of exclusive federal control, as an indispensable adjunct to the centralized regulation of rates and service, was long recognized and persistently urged—but, up to the war period, without success.

The need of service regulation had also been largely ignored. Not only was the cooperative use of plant and equipment rendered difficult by the policy of enforced competition and by the maintenance of multiple corporate ownership, but no satisfactory measures had been developed to insure adequacy of facilities and the enforcement of such service standards as would eliminate unsafe, discriminatory, and inefficient practices. Prime reliance had been placed on state activity, which tended to involve undue interference with management and operation, and subjected the carriers to the expense and burden of many rigid and conflicting statutory requirements. Up to the war period federal action had been largely restricted to the enactment of safety measures, and the character of the transportation service, in spite of its incalculable importance and its inseparable relationship to the problem of rates and credit and other recognized aspects of the regulative process, was allowed to develop chaotically and without the influence of any clearly defined governmental policy.

Finally, the tremendous significance of the railroad labor problem, and the necessity of formulating a constructive public policy toward labor relationships, had not received due recognition. The vital interdependence between transportation charges and railroad wages, because of the dominating influence of the item of compensation to railroad employees upon operating expenses, was largely ignored; the close relationship between the character of wage adjustments and working conditions and the quality of the transportation service made little impression upon the policies of the carriers or upon the regulatory activities of the public authorities; and even the paramount public interest in the maintenance of the continuity of railroad operation did not result in permanent and effective machinery for the settlement of railroad labor disputes. Tra-

ditional public policy expressed itself in halting and overcautious enactments, and in administrative expedients possessing the confidence of neither the managements nor the men—and through arrangements that neither in origin nor purpose nor practical adjustment were conceived as constituting an integral part of the process of regulation. The various federal laws dealing with railroad labor relationships were largely independent, extra-regulative, makeshift measures. In such an environment labor controversies became progressively more and more bitter, and finally comprehended in their scope a struggle between all the carriers and all the transportation workers, which placed in serious jeopardy the most vital public interest in railroad relationships.

§2. *The Significance of the War Experience*

American railroad experience during the period of the war—both under unified private operation and under Federal Control—is often assumed to possess much greater significance for the development of permanent policy than the facts of the experience justify. The relative merits of private and public management, for example, were by no means settled conclusively by the war-time operation of the railroads. In the formulation of post-war policy, therefore, the basic choice between continuing the historical American method of corporate ownership and operation, or embarking upon some scheme of nationalization, was still subject to determination, in large measure, by the old considerations of the temperament of our people and the character of our institutions.

The virtual breakdown of the railroad service in the winter of 1917 cannot justly be construed as proof of the inherent inability of private management to meet modern transportation needs. Many circumstances conspired to render the efforts of the carriers unequal to the extraordinary tasks which confronted them during the early part of the war period. Transportation facilities were inadequate—plant and equipment being

insufficiently developed, both extensively and intensively, to meet the war demands. This inadequacy was due directly to impaired railroad credit; but the failure of the railroad industry to attract new capital can be traced to both unsound financial practices on the part of the carriers and to restrictive rate policies on the part of the public authorities. Neither of these shortcomings were necessarily unavoidable under a system of private ownership and operation. In like manner, the difficulties encountered in utilizing existing carrying capacity effectively were the result of the legal obstacles to coöperation between the railroads, and of the maintenance of multiple corporate ownership of the transportation properties. The repressive influence of the anti-pooling clause of the Act to Regulate Commerce, and of the anti-trust laws as applied to the railroads, had been widely recognized even prior to the war emergency; and these restrictions admittedly hampered the efforts of the Railroads' War Board to effect necessary unification of railroad interests. The fact of multiple corporate ownership, because it emphasized the profit motive of the individual carrier and naturally involved exclusive exploitation of facilities, presented even more insurmountable obstacles to the full utilization of plant and equipment through unity of operation. But the policy of enforced competition and the failure to stimulate railroad consolidations were merely defects of the old system of public regulation; they did not discredit the system of private management as such.

Moreover, the unprecedented traffic burden of the war period and the unusual conditions of both the money market and the labor market were primarily responsible for the inadequacy of the transportation service immediately preceding Federal Control. Because additions to railroad plant and equipment could not be readily made in face of the war demands upon the productive process, complete unification of existing operating machinery was indispensable. Because private financing was at a great disadvantage in competition with government borrowing and served to hamper the flotation of war loans, it was

necessary to centralize the capital-raising function in the Government. Because of the difficulties of mobilizing the national man-power for military purposes without interference with essential economic activity, and because the high wage level in war industries was breeding discontent among the transportation workers, it was deemed urgent to bring railroad labor under direct government control. Entirely apart from the acknowledged shortcomings of the railroad situation under peace conditions, then, radical reorganization of the transportation system was unavoidable because of the extraordinary war conditions. The pressure of the national emergency rendered experimentation with private management a process too slow in development and too problematical in outcome to be acceptable under the circumstances. The adoption of Federal Control was not induced by any inherent defects of private ownership and operation.

Nor did the results of Federal Control determine decisively the relative merits of public and private management. The outcome of the policies and activities of the Railroad Administration was very creditable. The war traffic was moved successfully; the restrictions upon "non-essential" carriage were not excessive; measurable improvement in operating efficiency was attained, and substantial financial economies realized; there was no flagrant neglect of railroad plant, and a reasonable amount of new capital was applied to additions and betterments; labor relationships were adjusted on an equitable basis, and the continuity of the transportation service was uniformly maintained; and the financial deficits, though large in the aggregate, did not reflect unduly high "costs" or public "loss," in view of the legitimate increases in operating expenses and the low level of rates and charges. All of these results of public management, however, are but evidences of the success of Federal Control in meeting the war emergency; they possess but little positive significance with reference to the desirability of government ownership and operation as permanent railroad policy.

The war situation was an important factor in the solution of difficulties as well as in creating them. The Railroad Administration was enabled to exercise the unlimited war powers of the President, and it commanded a degree of coöperation from the railroad executives, the transportation workers, the shipping public, and the American people as a whole, which could not reasonably be expected under conditions of peace. The obstacles to efficient and economical operation which were bound up with the war effort were thus offset by the benefits resulting from the patriotic character of the undertaking. The importance of these advantages became apparent after the armistice, when popular relaxation from the war strain deprived the Government of the complete support of the operating staff and of the users of the transportation service. Under these conditions, the functions of management were not performed as efficiently as in the period of actual warfare, nor were the restrictions involved in unified operation accepted by the public with an equal degree of forbearance. The entire twenty-six months of Federal Control was an abnormal period: from January 1, 1918, to the signing of the armistice, because of the pressing demands of war; from the signing of the armistice until about the middle of 1919, because of the tasks of demobilization, and the initial depression which accompanied the transition from a war to a peace economy; and from the middle of 1919 to March 1, 1920, because of the general unrest and the adverse criticism of the Railroad Administration which marked the consideration of the impending return to private management and the formulation of new regulative policies. Neither the operating nor the financial results of this period, therefore, can possess any large significance in the settlement of the question of railroad nationalization from the standpoint of permanent policy.

The chief contributions of Federal Control toward the solution of the railroad problem must be found in its demonstration of the possibilities of unified operation, and of the advantages of constructive adjustment of labor relationships.

It is doubtful whether the transportation tasks of the war period could have been accomplished without the unification of railroad plant and equipment under a single control. The maintenance of multiple corporate ownership involves the subordination of public need to private profit. This fact was established even during the period of private war-time operation. Not until the Railroads' War Board, in spite of the legal obstacles to coöperation, resorted to the "pooling" process, was congestion measurably relieved and car shortage reduced to manageable proportions. Under Federal Control, the success of the Railroad Administration in the movement of traffic was due primarily to unification of shops and terminals, the common use of facilities, the extensive relocation of cars and locomotives, the control of traffic through priorities, permits, and embargoes, and the prevention of free routing of freight. The traffic problems of the war period were distinctive only because of their extent and urgency. Congestion and car shortage were not new phenomena, and are likely to recur in every period of industrial activity. While new lines, extra trackage, and additional facilities are necessary, the initial task is to secure as full and as flexible a utilization as possible of existing carrying capacity. Such an objective involves not merely the reversal of the traditional policy of enforced competition, but the constructive development of railroad consolidation, and the public requirement, especially in periods of great traffic need, of free coöperation in the use of transportation plant and equipment.

The adjustment of labor relationships under Federal Control provided the first significant experience with this essential aspect of sound railroad policy. The labor difficulties of the private managements during the early period of American participation in the war, as in the frequently troublous days of the preceding decade, were due to the public neglect of the labor interest in the regulative process. Authority over rates had been exercised without jurisdiction over wages, and no permanent machinery was available for the peaceable adjustment of labor disputes. The policy of the Railroad Administration

constituted a complete departure from this attitude. Wages were fixed by public authority on an equitable basis; working conditions were so regulated as to safeguard the legitimate interests of railroad labor; adjustment boards were established for the settlement of controversies. The agencies through which labor policy was formulated and enforced were permanent and expert. The railroad employees were allowed representation in the determination of their status in the transportation industry, and their aims and aspirations were accorded reasonable recognition. Through this policy, the continuity of the service was maintained, and the coöperation of the workers secured. The need of such uninterrupted service and labor coöperation is continuous. The experience of Federal Control provided an instructive basis for the development of permanent public policy toward labor relationships.

§3. *The Leading Proposals for the Settlement*

The war experience with the management and control of the railroads created the immediate occasion for the enactment of new legislation, and exerted a large influence upon the character of the settlement. But as early as December 7, 1915, President Wilson, in his message to Congress, called attention to the "serious and pressing" condition of the railroad problem, and recommended "a commission of inquiry to ascertain by a thorough canvass of the whole question whether our laws as at present framed and administered are as serviceable as they might be in the solution of the problem"; and in response to this recommendation the Newlands Committee was created by Congressional resolution of July 20, 1916—a joint subcommittee of the Senate Committee on Interstate Commerce and the House Committee on Interstate and Foreign Commerce. Hearings were held before the Newlands Committee from November 20, 1916, to December 19, 1917. The problems of wartime railroad operation temporarily diverted attention from the formulation of permanent policy, but soon after the signing

of the armistice the question of determining the status of the railroads subsequent to the Federal Control period became a matter of immediate concern. On December 11, 1918, Director-General McAdoo made his proposal for the extension of the tenure of government operation for five years. The wide disapproval which this suggestion evoked led to the emergence of numerous plans for the solution of the railroad problem, most of which were presented to the Senate Committee on Interstate Commerce. The Senate Committee hearings began January 3, 1919, and its deliberations were continued almost without interruption till October 23, 1919. At these hearings almost every conceivable interest was represented. Members of the Interstate Commerce Commission and of the state railroad commissions, officials of the United States Railroad Administration, railroad executives and operating officials, bankers and economists, representatives of security holders, shippers, traffic associations, chambers of commerce, and labor organizations all presented their views to the Committee. In addition, the proceedings of the Newlands Committee were made part of the record of the Senate Committee; and the House hearings, opened July 15, 1919, supplemented the more important Senate hearings.

In view of our extended discussion of the essentials of reconstructive policy in earlier chapters, it will be unnecessary to present even an outline of all of the numerous plans that were submitted. We shall confine ourselves to the more significant proposals—explaining, first, the plan of the Railroad Administration for an extension of Federal Control; second, the proposal of the Brotherhoods for the adoption of government ownership through the Plumb Plan; and third, the plans of the Interstate Commerce Commission, the railroad executives, and the owners of railroad securities for the modification of the regulatory system under private management.

The original suggestion of Director-General McAdoo for an extension of Federal Control to January 1, 1924, was elab-

orated in his testimony before the Senate Committee, and also received the support of his successor, Director-General Hines. The extension was advocated as a transitional measure, in order that the permanent solution might be rendered more sound and effective. In the words of Mr. McAdoo, as addressed to the chairmen of the Congressional committees on December 11, 1918: "This extension would take the railroad question out of politics for a reasonable period. It would give composure to railroad officers and employees. It would admit the preparation and carrying out of a comprehensive program of improvements of the railways and their terminal facilities, which would immensely increase the efficiency of the transportation machine. It would put back of the railroads the credit of the United States during the five-year period, so that the financing of these improvements could be successfully carried out. It would offer the necessary opportunity under proper conditions to test the value of unified control and the experience thus gained would of itself indicate the permanent solution of the railway problem." In his subsequent testimony before the Senate Committee these considerations were repeated, and in addition he argued that an extension of government tenure was necessary, in order that the permanent adjustment might have as a basis the results of the valuation of railroad properties then in process of determination by the Interstate Commerce Commission; in order that more time might be available for the coördination of railroad policy with the Government's policy toward the development of a merchant marine; in order that greater coöperation might be secured in the public management of the roads pending their restoration to private control; and in order that Congress might have "a reliable view of the economies which actually rise out of unified operation" and not adopt "a permanent solution in ignorance of one of the most important factors to be considered."[1] Director-General Hines later supported the program of extension on similar grounds, de-

[1] Statement and cross-examination of Director-General McAdoo, Senate Hearings, pp. 4-227.

veloping more fully the answers of the Railroad Administration to objections that had been raised in the interim. The operating tasks of the Railroad Administration would be rendered very difficult, in the absence of an extension of tenure, he argued, because of lack of coöperation (arising out of the unrest of officers and employees and the reaction of the people from the strain of war); because the proponents of new plans would seek to discredit the accomplishments of the Federal Control period; because it would be virtually impossible to secure the consent of the carriers to capital expenditures for improvements; and because the railroad problem would be in process of solution in the heat of the next presidential campaign. He denied, however, that administrative and financial chaos would follow the immediate restoration of private management, insisting that the purpose of extending government tenure was to bring about a more satisfactory permanent solution, rather than merely to avert temporary demoralization. Like Director-General McAdoo, therefore, he urged the immediate return of the roads to their private owners as an alternative to the five-year extension.[2]

[2] Statement and cross-examination of Director-General Hines, Senate Hearings, pp. 853-984. Mr. Hines also made tentative suggesstions for the permanent adjustment of railroad relationships. He advocated the restoration of private management at the end of the five-year period, and his recommendations were largely by way of criticism of the various proposals that had already been submitted. He argued that no permanent and satisfactory solution can be accomplished as long as we have the "numerous existing railway corporations with their widely varying financial structures"; as long as strong and weak roads continue to bid for competitive traffic, and the prosperous companies receive the entire benefit of their excess earnings; and as long as the various schemes for compulsory pooling and unification of terminals fall short of actual corporate merger and are thus made dependent upon the financial interests of the companies involved. Accordingly, he concluded that a permanent solution can be accomplished "through the creation of a comparatively few railroad companies, which will have capitalization equal only to the real value of the property, and which will have a moderate guaranteed return, with the right to participate moderately in any additional profits." (p. 903.) In cross-examination his suggestions were somewhat more concrete. He advocated a system of regional railroad companies, from six to twelve in number; public control by the Interstate Commerce Com-

The proposal of the railroad Brotherhoods contemplated a permanent solution of the railroad problem, rather than a mere transitional measure, and was distinguished also by the fact that it was the only significant plan involving the substitution of government ownership for corporate ownership of the railroad properties. Because the proposal of the Brotherhoods was formulated and ably supported by their general counsel, Mr. Glenn E. Plumb, it has come to be known as the Plumb Plan. Its advocates stressed the principles which the plan represented, rather than the specific details of the Sims bill, into which it was incorporated.

According to the Plumb Plan the American railroad properties were to be purchased by the Government, at a valuation to be determined, subject to review by the federal courts, by a board of appraisement, and to be paid for by an issue of United States bonds. From the standpoint of capital investment, therefore, government ownership was to replace private ownership. In order to promote efficiency, however, and "to prevent carelessness in regard to expenditures, which frequently, almost habitually, accompanies Government operation," a national railways operating corporation was to be created to administer and operate under a lease agreement the railroads so acquired by the Government. Ostensibly, therefore, public ownership was to be accompanied by private operation. The capital stock of this corporation was to be "held in trust for the benefit

mission and by a group of regional commissions equal in number to the regional companies, the jurisdiction of the state regulatory bodies to be limited to local matters and their findings to be utilized by the regional commissions in a coöperative spirit; federal incorporation and government representation (to the extent of one third) on the directorates of the regional companies; the creation of bi-partizan boards for the consideration of labor controversies; exclusive national control of security issues, building programs (with power to require extensions into new territory), and rates; a government guaranty of a fixed fair return on the capitalization of the railroads, with an opportunity to share moderately in excess profits, the government and labor to participate in the distribution of earnings in excess of the amounts so utilized.

of the employees"; but the company was to have no paid-in capital—being "an operating corporation where operating ability would constitute its sole capital." As a rental for the properties turned over to it, the corporation was to pay to the Government from its operating income, after all expenses of operation had been met and due provision had been made for maintenance, a sum equal to the fixed charges on the bonded indebtedness created by the United States in the acquisition of the properties, together with a reasonable sinking fund contribution for the retirement of the bonds. All net revenues then remaining were to be divided equally between the Government and the operating corporation. The Government's share of these earnings was to be used for additions and betterments, or for the further accumulation of the sinking fund; the corporation's share was to "constitute a trust fund to be declared as a dividend upon the amounts paid to the labor which it employs, every employee, from president to office boy, receiving that proportion of the trust fund which his annual wage bore to the total annual compensation of all employees."[8] (In the legislative formulation of the Plumb Plan it was provided that the dividend of the appointed employees was to be adjusted at twice the rate of the classified employees.)

The corporation was to be administered and the roads operated by a board of fifteen directors, five to be appointed by the President of the United States, five to be chosen by the appointed officers and employees, and five to be elected by the operating force—that is, by the classified employees below the grade of appointed officials. This board was to exercise the power to appoint all major officials, to classify employees and prescribe conditions of employment, and control the operating activities of the roads. Labor controversies were to be settled by a central wage board and subsidiary adjustment boards, each consisting of an equal number of representatives of the appointed and classified employees, the decisions of these

[8] Senate Hearings, p. 998.

boards to be final, except in case of deadlock, when the dispute was to be decided by the board of directors. The Interstate Commerce Commission was to be retained with its traditional powers, and was to be clothed with such further authority as might be deemed proper in order "to secure full regulation, adequate and efficient service, ample and complete equipment."

Railroad extensions, under this plan, were to be made either through new capital funds provided by the Government (as far as possible out of its share of excess earnings), or through taxation of the community primarily benefited by the proposed extension, or through resort to both of these sources. The building of new lines deemed necessary in the public interest, and of no special benefit to the locality involved, might be required by the Interstate Commerce Commission, and was to be paid for entirely with Government funds; but where extensions, applied for by a given territory, are deemed mutually beneficial to the general welfare and to the given locality, the building of the extension was to be discretionary, and the relative advantage to the public and the local community was to constitute the basis for the division of expenditure between government funds and taxation; and where the community was willing to pay the entire cost of the extension the construction of the new line was to be made obligatory upon the operating corporation.

Provision was also made "for an automatic reduction in rates." When the Government's share of excess earnings in a given year exceeds 5 per cent. of the gross operating revenue, rates were to be reduced by the Interstate Commerce Commission to such extent as to absorb this excess, resulting in a 5 per cent. reduction in the general rate level. "This would act as an automatic check on the profits accruing to labor," testified Mr. Plumb, "an automatic check on operating income in excess of the requirements of operation, and would develop a constant tendency . . . to a reduction in the cost of operation." [4]

[4] Senate Hearings, pp. 1001-1002.

The advocates of the Plumb Plan pointed to numerous advantages that would flow from its adoption. It would lower the cost of financing the roads. Because the security of government bonds is so much superior to that offered by private corporations, the Government, argued Mr. Plumb, "can finance its undertakings on a rate of return anywhere from 25 to 50 per cent. below the rate demanded by investors when the same undertaking is financed by private corporations." [5] With speculative risks eliminated, railroad securities would become stable. The roads would be removed from partizan political activity. The holders of the Government bonds, with their rate of return fixed, could secure no benefit from political action; and no political body would "be subjected to the solicitations of either labor or capital" with reference to the operation of the roads, since no government officials as such would exert any influence upon the employment of men or the construction of new lines. The sharing of profits by the employees would improve the morale of labor and increase operating efficiency. The centralization of ownership in the Federal Government and the administration of all the railroad properties by a single national corporation would eliminate practically all conflict between the nation and the states in the regulation of the carriers. Rates would be reduced to a minimum and the transportation service rendered at cost; and communities benefiting by extensions would pay an equitable share of the cost of their construction. The advantages of private initiative would thereby be retained and the public interest would be constructively advanced. "Such a scheme of operation would render to the public all of the benefits of unified operation . . . permitting the using of all terminals, buildings, cars, and equipment most economically, the routing of traffic to ports best able to handle it—every economy which can possibly result from the unified handling of the means of transportation by one authority. It would eliminate all the costs of competi-

[5] Senate Hearings, p. 994.

tion, without losing any of the benefits of competition. It would stimulate economy, efficiency, and good service." [6]

The proponents of the Plumb Plan advocated a complete break with the past, the adoption of an entirely new system of railroad ownership and operation; the recommendations of the Interstate Commerce Commission, on the other hand, were restrained and conservative, being designed to repair rather than replace the existing regulative structure. The Commission declared its conviction "that with the adoption of appropriate provisions and safeguards for regulation under private ownership it would not be wise or best at this time (its memorandum was submitted to the Senate Committee January 7, 1919) to assume Government ownership or operation of the railroads of the country." But it expressly recognized the futility of restoring private management without "a broadened, extended, and amplified governmental regulation," wisely and intelligently enforced, and its recommendations were intended to modify the old system of regulation toward this end. These recommendations were cast in the form of general suggestions rather than specific proposals; unlike the Plumb Plan, or the plans of the railroad executives and the owners of railroad securities subsequently to be explained, the memorandum of the Interstate Commerce Commission was not presented in the form of possible sections of a future bill.

The Commission presented two groups of recommendations: the first group it deemed necessary and applicable whatever line of policy might be determined upon with regard to the future of the railroads; the second group it considered especially appropriate "in the event of a continuance of the policy of private ownership and operation under governmental regulation." Since these recommendations merely suggested items that should receive legislative consideration, and since they deal with matters which have been discussed previously in some

[6] Senate Hearings, p. 999. Complete statement and cross-examination of Mr. Plumb, pp. 985-1027. See also H. R. 8157 (the Sims bill).

detail, they may be stated, without elaboration, in the form of propositions, as submitted by the Commission. The first group, to constitute an integral part of any railroad plan, comprised the following suggestions: (1) "The prompt merger, without friction, of all the carriers' lines, facilities, and organizations into a continental and unified system in time of stress or emergency." (2) "Merger within proper limits of the carriers' lines and facilities in such parts and to such extent as may be necessary in the general public interest to meet the reasonable demands of our domestic and foreign commerce." (3) "Limitation of railway construction to the necessities and convenience of the Government and of the public and assuring construction to the point of these limitations." (4) "Development and encouragement of inland waterways and coördination of rail and water transportation systems." The second group, especially applicable to the system of private management and public regulation, comprised the following suggestions: (1) "Revision of limitations upon united or coöperative activities among common carriers by rail and by water." (2) "Emancipation of railway operation from financial dictation." (3) "Regulation of security issues" by the Federal Government. (4) "Establishment of a relationship between Federal and State authorities which will eliminate the twilight zone of jurisdiction and under which a harmonious rate structure and adequate service can be secured, state and interstate." (5) "Restrictions governing the treatment of competitive as compared with noncompetitive traffic." (6) "The most efficient utilization of equipment and provision for distributing the burden of furnishing equipment on an equitable basis among the respective carriers." (7) "A more liberal use of terminal facilities in the interest of proper movement of commerce." (8) "Limitations within which common-carrier facilities and services may be furnished by shippers or receivers of freight."[7]

[7] The memorandum of the Interstate Commerce Commission was presented to the Senate Committee by Commissioner Edgar E. Clark.

Perhaps the most vigorously supported of the many plans involving the restoration of private management that were submitted to the Senate Committee was that of the Association of Railway Executives. This plan represented the views of practically all the railroads in the United States, the Association being "composed of about 92 per cent. of the trackage of the country." It was presented by Mr. Thomas DeWitt Cuyler, President of the Association, in the form of "principles which should be incorporated in a plan providing for government regulation of carriers engaged in interstate commerce." There also appeared before the Senate Committee on behalf of this plan, Mr. Alfred P. Thom, General Counsel of the Association, Mr. Julius Kruttschnitt of the Southern Pacific Company, and Mr. Daniel Willard of the Baltimore and Ohio; and statements by Mr. Howard Elliott of the

It represented the views of the entire membership of the Commission, with the exception of Commissioner Robert W. Woolley. Mr. Woolley submitted a separate memorandum, which was largely devoted to an explanation of the reasons which led him to favor the extension of Federal Control, as recommended by Director-General McAdoo. In addition, however, he suggested the following two further recommendations, if the roads were to be restored to their private owners: (1) "With power to supervise the issuance of railroad securities, to prescribe service regulations, and to fix the minimum as well as the maximum transportation rates vested in the Interstate Commerce Commission, the commission should also be made the tribunal to which carriers and employees, organized and unorganized, would appeal for adjustment of any differences arising between them; also, it should have authority to investigate from time to time the living conditions of railroad workers, to insure regularity of employment, and to fix a minimum wage." (2) "The carriers should be required to set aside fixed portions of their gross annual incomes for depreciation, the percentage to be determined in each case by the Interstate Commerce Commission." Commissioner Clark explained that the majority memorandum excluded the matter of labor relationships because it was the established policy of Congress (as under the Erdman and Newlands acts) to entrust these responsibilities to other agencies; and that it made no mention of the matter of depreciation because no further authority was necessary. Complete statement and cross-examination of Commissioner Clark, including Mr. Woolley's memorandum as well as the memorandum of the Commission, Senate Hearings, pp. 231-285, 339-377. Statement and cross-examination of Commissioner Woolley, pp. 379-430.

Northern Pacific and Mr. Samuel Rea of the Pennsylvania Railroad were read into the record.[8]

The proposals of the railway executives were based on the initial premise that "private ownership, management, and operation of the American railways should as a matter of national policy be continued." The distinctive features of the plan were centered in recommendations for radical change in the machinery of public control; the substantive items of the program were directed to the elimination of well-recognized difficulties and were in reasonable conformity with many of the suggestions for reform that had received wide acceptance.

With regard to machinery of control, the essential provisions of the plan may be summarized briefly. The power to regulate the instrumentalities of interstate commerce, and especially as to railroad rates, both state and interstate, should be vested exclusively in the national government, under a system of compulsory federal incorporation. The powers of the state commissions should be continued, except in so far as they interfere with the accomplishment of this purpose. The Interstate Commerce Commission should be relieved of its executive and administrative functions (except as to accounting and valuation), and should act merely as a quasi-judicial body for the adjudication of controversies concerning the reasonableness and adequacy of rates and for the prevention of discriminations. In order "that matters within its jurisdiction may be dealt with more promptly and more satisfactorily and with a fuller appreciation of all the circumstances and local conditions," the Interstate Commerce Commission should divide the country into such number of regions as it might deem desirable, over each of which a regional commission should be appointed by the President. These regional commissions, consisting of one member from each

[8] Complete statement and cross-examination of Mr. Cuyler, Senate Hearings, pp. 305-337; of Mr. Thom, pp. 430-537; of Mr. Kruttschnitt, pp. 555-605; of Mr. Willard, pp. 1201-1252. Statement of Mr. Elliott, pp. 1253-1260; and of Mr. Rea, pp. 1311-1318.

of the states embraced in the respective regions, should exercise authority similar to that of the central Commission, serving as boards of primary jurisdiction. In addition, a Department of Transportation was to be created, the head of which was to be a member of the President's cabinet as Secretary of Transportation. The executive and administrative functions of the Interstate Commerce Commission were to be transferred to the Secretary of Transportation, and he was to exercise broad powers of control over the activities of the carriers.

The chief substantive proposals of the railway executives may likewise be stated briefly. In order to stimulate a greater degree of operating unity, it was stipulated that "the system of incorporation should provide a means of consolidation and merger for existing corporations engaged in interstate or foreign commerce, with the necessary power of condemnation, provided the secretary of transportation finds that such consolidation or merger is not contrary to the public interest and approves the same."[9] Toward this same end, the construction of new or branch lines of railroad or of large and expensive terminals was to be prohibited without a certificate of convenience and necessity from the Secretary of Transportation. In addition the Secretary was to be authorized, in case of need, to distribute traffic over such lines and routes as will relieve congestion, to compel the joint use of terminals, to require the carriers to distribute their cars, and to unify the entire transportation system into a single operating machine in times of national crisis. In order that all these means of unification, through actual merger or informal coöperation, might be rendered effective, it was provided that existing laws should be so modified as to authorize, upon approval of the Secretary of Transportation, intercorporate stockholding and consolidations, agreements as to rates and practices, the pooling of transportation facilities, and "the division of earn-

[9] Senate Hearings, p. 312.

ings in connection with the elimination of unnecessary train service."

Rates were to be initiated by the carriers, filed with the Interstate Commerce Commission, the Secretary of Transportation, and the state commissions interested, and were to become effective within 30 days, unless suspended by the Secretary of Transportation, for a period not exceeding 60 days, and referred to the Interstate Commerce Commission "for consideration and determination." Whether approved or disapproved by the Secretary, such rates might, upon complaint, be brought before the Commission for determination of their reasonableness and adequacy. The Commission, however, was to be subject to a statutory rule of rate-making, which "should require that rates be not only what has been called reasonable, but adequate and sufficient to enable the carriers to provide safe, adequate, and sufficient service, to protect existing investment, and to attract the new capital necessary in the public interest, and, to that end, the statute should, among other things, specifically provide that the level of rates must properly reflect the cost of wages and all other expenses incident to the furnishing of transportation." [10] The Commission was to have authority "to prescribe minimum as well as maximum rates and to determine the relation of rates and differentials"; and carriers were to be given the right to file complaint against the rates of other carriers "in the same manner and to the same extent as a shipper might do." Exclusive control over security issues was to be vested in the federal government.

The recommendations of the railway executives as to labor relationships may be stated compactly in the words of the statement as submitted by their spokesman:

"Continuity and regularity of transportation are absolutely essential to the public. Both the capital invested and the labor employed in transportation are therefore engaged in a business vitally affecting the public interest, and by engaging therein

[10] Senate Hearings, p. 310.

assume the implied obligation not unreasonably to impair or interrupt the movement of trains. Questions of wages and working conditions affecting individual railroads should be settled, if possible, by officers of the railroads and representatives of the employees. A board should be constituted, under the secretary of transportation, on which the employees, the employers, and the public should have equal representation, with the duty and authority to investigate and report to the secretary of transportation on the merits of any controversy, which the parties are unable to adjust, arising in the railroad or other transportation service, either in regard to wages or in regard to conditions of service; and, pending such investigation and report and for a reasonable time thereafter, there should be no lockout by the carriers and no concerted action on the part of employees which would have the effect of interfering with or interrupting the orderly movement of the United States mail or interstate or foreign commerce. The scale of wages and the expense incident to any change in the conditions of service recommended in the reports of such board, if put into effect, should be accepted and recognized in the making of rates as a legitimate expense of transportation." [11]

The plan of the National Association of Owners of Railroad Securities was presented to the Senate Committee by Mr. S. Davies Warfield, the President of the Association.[12] While it differed radically in many of its important details from the proposal of the railway executives, its primary purposes were substantially the same: namely, to secure more liberal transportation earnings and to rehabilitate railroad credit. Its essential features involved the creation of a federal corporation (the National Railways Association), to facilitate the financing of the return of the roads to private management, and to form a permanent agency of coöperation between the Government and the carriers, particularly in effecting unity of operation; the establishment of regional commissions for the performance of the regulatory functions in conjunction with the Interstate Commerce Commission, the central Com-

[11] Senate Hearings, p. 311.
[12] Complete statement and cross-examination of Mr. Warfield, Senate Hearings, pp. 789-815, 1139-1161.

mission also serving as "a body of appeal"; the "initiation" of rates by rate committees, composed of railroad men and shippers appointed by the Interstate Commerce Commission; the provision of boards of labor conciliation, the regional commissions to act in this capacity in the first instance; and the adjustment of rates so as to produce a fixed return of 6 per cent. to the railroads, taken in groups, one-third of the earnings of each road in excess of this amount to be retained by the carrier earning it, as an incentive to efficiency, and the remainder to constitute a fund, one-half of which was to be used for the benefit of the employees, and the other half to be paid to the National Railways Association and to be administered by the Interstate Commerce Commission.

The fundamentals of the plan, "stripped of operating details," may be stated in the form in which they were presented to the Senate Committee: [18]

"1. A minimum rate of return on the property investment in the railroads, fixed by act of Congress, through rates adjusted as occasion may demand, in order that the securities of the railroads may be stabilized and their credit established on a basis necessary to secure the money to provide to the shippers and traveling public adequate facilities and service.

"2. Recognition that a fixed return through rates that will enable the average railroad to receive an adequate return on its invested capital is not possible without giving to the more favorably situated railroads more revenue than the public will sanction, or more than would represent a fair return on its property. The earnings of railroads in excess of a fixed reasonable rate of return to be applied as provided in the following section.

"3. A distribution under the control and jurisdiction of the Interstate Commerce Commission of a percentage of the fund above provided, that railroad employees shall receive the benefit of profit sharing, by insurance or by such other legal

[18] Senate Hearings, pp. 793-794.

methods as may be determined upon; likewise a distribution of a percentage thereof among the railroads earning it, and under the plan, and in furtherance of incentive and initiative by establishing operating efficiency standards; for certain improvements to railroad property, under restrictions, not to be capitalized in rate-making; and for other purposes defined in the plan.

"4. A corporation, created by act of Congress, operated without profit to the railroads, and under Federal control, directed by trustees composed of the nine Interstate Commerce Commissioners and eight railroad men, to finance in the present emergency such equipment as may be purchased by it from the Railroad Administration and allocated to the railroads, and to furnish an immediate means for assisting in financing the return of the roads; continued as a permanent means of mobilizing and purchasing equipment to be leased to the railroads; to provide a management or agency to continue or put into effect the joint use of terminals, unification of facilities, rerouting of freight by pooling or otherwise, and to continue or adopt such methods of operation as may have been found to be successful and expedient during Federal control; to furnish a standing, trained, and efficient means for immediate mobilization of the railroads for war purposes without additional legislation.

"5. Federal regulation extended through the Interstate Commerce Commission as at present established, coördinating therewith subsidiary commissions, as regional commissions, the members thereof selected equally from the two leading political parties appointed from and sitting in the six traffic territories as at present defined, giving to such bodies the determination of rates and regulations essential to the operation of the plan. The right of appeal is given to the Interstate Commerce Commission, which may be designated commission of appeal.

"6. Continuation of rate committees, composed of both representatives of railroads and shippers, established in defined territories of the country, to primarily consider and

pass upon all changes in rates requested by either railroads or shippers and before being filed with the regional commissions or Interstate Commerce Commission, as provided in the plan.

"7. Coördination by the Interstate Commerce Commission of the work of the State commissions as far as the limitations of the law and the legislation provided under the plan will permit with that of the regional commissions. The adjustment of intrastate rates to the requirements of interstate commerce, as prescribed through interstate rates, is vested in the Federal commissions.

"8. Regional commissions act as boards of conciliation for the settlement of wage differences between the railroads and their employees. In default of settlement such commissions shall appoint two arbitrators, the employees naming two, the four so elected naming the fifth, if required. Appeal may be taken to the Interstate Commerce Commission, the findings not to be compulsory unless mutually agreed beforehand. A fixed return being provided under the plan, expenditures for wages or other elements entering into expenditures are supervised by the commissions.

"9. Future issues of railroad securities supervised by the regional commissions and the Interstate Commerce Commission." [14]

[14] Two further plans, representative of the views of large and influential organizations, should receive brief mention. They are the plan of the National Transportation Conference, held under the auspices of the Chamber of Commerce of the United States, incorporated into the Frelinghuysen bill (S. 2998); and the plan presented by Nathan L. Amster, President of the Investors Protective Association of America (Senate Hearings, pp. 1163-1182), incorporated into the Lenroot bill (S. 2889). The *Transportation Conference Plan* provided for the restoration of private management immediately after the enactment of necessary legislation; for the consolidation of existing lines into strong competing systems under compulsory federal incorporation; for exclusive federal control of security issues and capital expenditures, and national regulation of intrastate rates affecting interstate commerce; for the creation of a federal transportation board to exercise executive and administrative functions; for the enactment of a statutory rule of rate-making by which rate schedules should be

§4. *The Trend of Opinion*

The proposal of the Railroad Administration for the extension of government tenure for a period of five years encountered almost universal disfavor. It was felt that the postponement of the railroad adjustment till after the presidential campaign of 1920 would accentuate rather than remove the influences of political considerations upon the settlement of the problem; for the various programs of solution would thereby be injected into the political conflict as campaign issues, and the unhealthful condition of "the railroads in

designed to yield an annual return of 6 per cent. upon the aggregate fair value of the property of the roads in each group; for the creation of a railroad reserve fund for the period of transition to private management, and for the establishment, out of excess earnings, of a contingent fund by each carrier to support its own credit, and of a general railroad contingent fund, maintained by contributions from the prosperous roads, and administered by appointees of the transportation board to strengthen the credit of all the railroads in the country; for the adjustment of wages, hours, and working conditions by boards equally representative of the railroad officials and the railroad employees, the transportation board to render final decision in case of disagreement; and for labor and public representation on the directorates of the consolidated railroad companies. The *Amster Plan* provided for the incorporation, under a federal charter, of a national transportation company, in which the ownership of all the roads was to be vested, and which was to be administered by a board of directors, appointed by the President of the United States, representative of the stockholders, the employees, the public regulating authorities, and the commercial and agricultural interests; for the valuation of the railroad properties as a basis for the exchange of the existing securities of the carriers for the stock of the proposed corporation, and for rate-making purposes; for the adjustment of rates so that sufficient revenues may be produced to meet all necessary expenses, charges, the maximum dividends (not to exceed 6 per cent.), and, as a surplus, "a sum not exceeding 2 per cent. of the par value of all outstanding stock"; for the distribution of earnings in excess of the amount necessary for the maximum dividend (40 per cent. to labor, 30 per cent. to the stockholders, and 30 per cent. to repay advances from the Government, or for a reserve fund, or to retire stocks and bonds, or for improvements not to be capitalized); for Federal Control of security issues; for the creation of an economy and efficiency board to examine the properties and study the operations of the carriers and recommend improvements in physical facilities and operating methods; and for the appointment of bi-partizan labor boards, the right of the employees to organize and bargain collectively to be fully recognized.

politics" would be intensified and prolonged. It was argued that the employees would be as restless and the operating officials as unsympathetic during the five-year period as during the "twenty-one months after the proclamation of peace" originally provided in the Federal Control Act; for the character of the ultimate adjustment would remain as uncertain and problematical. It was submitted that the consent of the carriers to public initiation of additions and betterments and the acquisition of new equipment could be as easily secured during the shorter as during the longer period, provided the improvements were essential to the service, and not merely induced by a desire to establish a dominant government interest in the properties of the railroad corporations. It was acknowledged that government assistance in the financing of the roads during the period of transition would be necessary, but it was insisted that such aid would be cordially welcomed without resort to the extension of Federal Control.

The real issue, however, was whether an extended test should be provided, under conditions entirely removed from actual warfare and reasonably free from the difficulties inherent in the immediate transition from a war to a peace economy, in order to ascertain the permanent value of unified railroad operation. On this larger question public opinion had definitely crystallized in vigorous disapproval of the proposed continuation of Federal Control. The large operating deficits were being currently construed, though unsoundly, as unquestioned evidence of government inefficiency in the management of the roads; and the prospect that the roads would have to be subsidized by the public treasury for a period of five years was viewed with serious alarm. The large wage increases and the national agreements as to working conditions that had been authorized by the Railroad Administration were being widely interpreted, though unjustly, as a surrender of the Government to the power of labor; and fear was frequently expressed that forces had been set in motion by Federal Control that would ultimately lead to the complete domi-

nation of the railroad industry by the organized transportation workers. The very process of unification, from which so much had been expected, was regarded as unduly restrictive of corporate rights and unduly repressive of public needs. It was believed that the five-year extension would finally lead to the complete nationalization of the railroads—not because the superiority of Federal Control over private management would necessarily be established, but because the transportation lines would become so intimately welded into a single operating system, and the interests and responsibilities of the Government would become so closely intertwined with the rights of the carriers, that the restoration of private management would be rendered too difficult to be practicable. The public reaction from the strain of the Great War, particularly after it was realized that the peace settlement was degenerating from a highly "idealistic" to a strictly "realistic" adjustment, discouraged all experimentation with radical change in industrial relationships. Reversion to "normal conditions," establishment of "economic stability," elimination of "war agencies," reduction of "government interference" were the slogans which exerted a dominant influence upon the formulation of public policies after the armistice. As applied to the railroad problem, this attitude was irreconcilably opposed to the proposal for a five-year extension of Federal Control.

Considerations such as these also account, in large measure, for the "unanimity" with which the Plumb Plan was condemned and repudiated. Only those sympathetic with its general purposes gave serious study to the details of the plan and called attention to its weaknesses. It was criticised, in this spirit, because the wage-fixing function, in spite of the fact that the payment of interest on the bonds with which the roads were to be acquired was to become a direct obligation of the Government, was vested solely in a board composed of the classified employees and the operating officials; because no practical machinery was created whereby losses from operation, under a given level of rates, might be shared by those, aside

from the Government, who were entitled to participate in excess profits; because there was no "engagement on the part of labor that it would invest its life and toil in the enterprise" and "stand by the railways through stress and storm" as capital investment had been compelled to do. But the underlying objections to the Plumb Plan were more deeply rooted. They sprang from a determination to avert a complete break with the past, to safeguard the traditional method of corporate ownership even in the field of railroad transportation, to forestall the extension of collective economic enterprise to more essentially private undertakings, to prevent the acceptance of "labor investment" in place of capital investment as the basis of industrial control.

The Plumb Plan involved government ownership of the railroad properties; and government ownership, because of the individualistic temper of the American people and the prevailing dogma as to the essential incompatibility between democratic institutions and public efficiency in industrial enterprise, had failed to receive substantial recognition as a wise or practicable alternative to the system of private ownership. The proponents of the Plumb Plan attempted to meet the traditional objections by providing for the operation of the roads by a private corporation under lease from the Government. The critics of the plan, however, saw in this device but a nominal provision for private management. While the railroad employees would not be government servants in the strict sense (being engaged by the operating corporation), the government authorities, on behalf of the public owners of the properties, would necessarily be vested with ultimate control (in spite of the fact that their formal representation on the directorate of the corporation would be limited to one-third of its membership). Moreover, it was urged that the fruits of private management are in essence dependent upon the profit motive, and that the possibility of private profit must be available for capital as well as labor, in order to

provide the necessary incentive to operating efficiency and progressive development.

Indeed, the proposals of the Plumb Plan were regarded as more menacing than the usual program for the nationalization of the railroads. It was believed that the public acquisition of the roads under the plan sponsored by the Brotherhoods contemplated the complete domination of the railroad industry by the transportation workers—a domination legally established through the initial adjustment, instead of tending to arise in the course of time from the subversion of the proper purposes of railroad nationalization as commonly advocated. Adverse opinion was thus strengthened by general resentment against the proposed employment of governmental power and national resources for the advancement of the interests of a particular class or a special group. The frequent suggestion by the supporters of the plan that the value of the railroad properties for purposes of condemnation might be found not to exceed twelve billion dollars added fuel to this resentment. Approval of the Plumb Plan, therefore, came largely from organized labor, and active support was limited to the efforts of the four great railroad Brotherhoods. The opponents of the plan, on the other hand, included, in addition to the vast body of conservatives, many who were nominally favorable to public ownership, as well as large numbers who were deeply impressed with the abuses and inadequacies of the old system of private management, and who were warmly sympathetic with some of the specific principles of the plan (as, for example, employee and public representation on the directorates of the carriers, and the establishment of equitable labor relationships).

On the basic question, then, of continuing the old system of corporate ownership and operation, or substituting therefor some scheme of railroad nationalization, the trend of opinion was clearly defined. There was an unmistakable popular mandate for the restoration of private management under corporate ownership. But there was an equally clear demand

for the reconstitution of the old system of public regulation. The numerous railroad plans formulated during the year 1919 were chiefly concerned with principles and machinery for the modification of the established regulative method. These plans differed in emphasis and completeness, and were diverse in detail; but there was some measure of agreement as to the main shortcomings of the railroad situation, and considerable similarity in the nature of the remedies proposed.

It was recognized that the existing machinery of control was inadequate—that the Interstate Commerce Commission was overburdened, and that it was compelled to perform an unreasonable diversity of functions—and this led to the various proposals for the creation of regional commissions, for the establishment of a transportation board, and for the addition of a secretary of transportation. The legal difficulties involved in maintaining national supremacy in railroad control, especially under the extended powers contemplated in all the proposed legislation, led to the provisions for permissive or compulsory federal incorporation. Because of the universal realization that diffused responsibility in railroad regulation, particularly as manifested in conflicts between state and federal authority, is destructive of transportation efficiency and affords inadequate protection for the public interest, practically all of the plans provided, specifically, for exclusive Federal Control of security issues and capital expenditures, and recognized the necessity of dominantly national supervision of rate adjustments. The advantages of unification disclosed during the Federal Control period account for the common proposals for permissive or compulsory consolidation of railroad properties, into a single national system or into large competing groups; for the assumption of public control over new construction; for government supervision of service and facilities, especially in time of congestion or other emergency; for the modification of existing legal obstacles to free coöperation between the carriers. The widely acknowledged necessity of rehabilitating railroad credit ex-

plains the frequent inclusion of a statutory rule of rate making, whereby sufficient revenue might be assured to the railroads, after all legitimate expenses, to yield a fair return on past investment and to stimulate the flow of new capital for extensions and improvements. Because of the impossibility of fixing transportation charges that will produce reasonable income for the roads as a whole, or in groups, without providing unduly high returns for the stronger individual lines, many of the plans included stipulations for the distribution of excess earnings between the public, labor, and the carriers. The difficulties of the railroad labor problem in recent years, and the success of the Railroad Administration in regulating labor relationships during the period of government control, led to the provision, in most of the proposals, for temporary or permanent boards for the adjustment of wages, hours, and working conditions and for the settlement of labor controversies. These currents of opinion served as the general background of subsequent Congressional action; the details of the adjustment incorporated into the Transportation Act of 1920 were necessarily determined by the political representatives of the people.

CHAPTER XI

THE TRANSPORTATION ACT OF 1920

The Esch-Cummins Act is the basis of the railroad adjustment which followed the termination of Federal Control and the restoration of the railroad properties to private management. This legislation, officially designated as the Transportation Act of 1920, constitutes the legal framework of the transitional settlement with the carriers, and the public formulation of the substantive principles and administrative machinery of our reconstructed system of railroad regulation. It is the product of a great complexity of influences. The need for new legislation sprang fundamentally from the vital shortcomings of the railroad industry that had been disclosed in recent years, even prior to the outbreak of the war. This need was accentuated by the war emergency, and the policies and activities of the war period, both during the months of private operation and in connection with Federal Control, helped to foreshadow the general character of future railroad policy. Then an extensive investigation of the problem by committees of both houses of Congress resulted in the presentation of the numerous plans and proposals considered at some length in the preceding chapter. These plans and proposals provide the more immediate background of the settlement. Through the analysis of railroad conditions upon which they were based the representatives of the people were the better able to discern the direction of the dominant ends to be accomplished, and the nature of the adjustment which would command the approval of public opinion. These proposals also suggested certain concrete arrangements, distinct departures

from the traditional legislative approach toward the railroad problem, which ultimately found their way, though often in modified form, into the new legislation. In a very real sense the Esch-Cummins Act is eclectic in spirit—not a mere compromise between widely divergent policies (though in many of its most important provisions it was distinctly a compromise measure), but a formulation of policy largely influenced by and deeply grounded in the opinions and recommendations of a great diversity of important interests and competent individuals. The direct basis of the Transportation Act of 1920, however, is to be found in the various bills representative of these opinions and recommendations that were introduced in the two houses of Congress for the purpose of securing public sanction of specific measures. The final emergence of the new legislation can be traced most effectively through an examination of the development of these bills. This task involves a consideration of the legislative history of the Esch-Cummins Act.

§1. *The Legislative History of the Esch-Cummins Act*

The primary responsibility for the concrete formulation of legislative measures under our system of highly organized Congressional procedure rests upon the specific committees of the Senate and the House of Representatives to which all proposals in each particular field must be referred for consideration and report. In connection with the problem of the railroads this responsibility, in the sixty-sixth Congress, fell upon the Senate Committee on Interstate Commerce, under the chairmanship of Senator Albert B. Cummins of Iowa, and the House Committee on Interstate and Foreign Commerce, under the chairmanship of Representative John J. Esch of Wisconsin.[1] The bills prepared by these committees served

[1] When hearings on the railroad problem were begun early in 1919, Senator Ellison D. Smith, Democrat, of South Carolina, was Chairman of the Senate Committee, and Representative Thetus W. Sims,

as the primary basis of the Transportation Act. There were other important bills, introduced by individuals through request of special interests or in response to demand for particular modes of settlement, but their influence upon the final legislation was but indirect and incidental.[2]

The first of the House bills which was to be sponsored by the Committee on Interstate and Foreign Commerce was introduced by Chairman Esch on June 2, 1919, almost a month and a half before the House hearings were instituted on July 15. This bill was referred to the House Committee. At the same time Senator Pomerene of Ohio introduced into the Senate an exact counterpart of this bill, which was referred to the Senate Committee. This measure came to be known as the Esch-Pomerene bill.

By the provisions of the Esch-Pomerene bill, the authority of the Interstate Commerce Commission was to be extended in a number of directions. The Commission was empowered to approve and regulate extensions; to formulate rules and regulations for car service, and to enforce the provision of

Democrat, of Tennessee, was Chairman of the House Committee. On March 4, 1919, the political complexion of both houses of Congress changed, and Republican majorities appeared on both committees.

[2] The following were the more important bills introduced: H. R. 4378 and S. 1256, the Esch-Pomerene bill, representing the plan of the Interstate Commerce Commission; H. R. 10453, the later Esch bill, drafted by a sub-committee of the House Committee; S. 2906, the original Cummins bill, representing the Senate Committee plan; S. 3288, the second Cummins bill, superseding the original Senate measure. These bills were largely molded through the labors of the Congressional committees, and are given detailed consideration in the pages that follow. In addition, there were introduced: S. 2889, the Lenroot bill, representing the Amster plan supported by the Investors' Protective Association of America; S. 2998, the Frelinghuysen bill, representing the Transportation Conference plan sponsored by the Chamber of Commerce of the United States; and H. R. 8157, the Sims bill, representing a legislative formulation of the Plumb Plan. This latter group of proposals, as well as the railway executives' plan embodied in a tentative draft of a bill by T. D. Cuyler, President of the Association of Railway Executives, and the security owners' plan embodied in a tentative draft of a bill by S. Davies Warfield, President of the National Association of Owners of Railroad Securities, both of which were laid before the House Committee, have received adequate consideration in the preceding chapter.

adequate facilities; to supervise the joint use of terminals; to regulate mergers, consolidations, pooling, and traffic agreements—such operations and activities to be valid when entered upon with the approval of the Commission; to exercise plenary authority in prescribing maximum, minimum, and joint rates, "any act, decision, or order of any state or state authority to the contrary notwithstanding." The period of rate suspension was limited to 120 days. Exclusive authority to regulate security issues was vested in the Commission, the state commissions affected merely to be notified of all applications by the carriers for approval of contemplated issues of securities. In brief, the existing regulative structure was to be so amended as to increase the power of the Interstate Commerce Commission over rates, service, consolidations, extensions, and capitalization, and there was considerable addition of authority with regard to operation, including traffic priorities, pooling, and the joint use of facilities.

This measure represented to a large degree the views of the majority of the members of the Interstate Commerce Commission, and all the changes were offered in the form of amendments to the Act to Regulate Commerce. On the whole, it was a conservative proposal, amplifying, along well-recognized channels, the traditional scheme of railroad regulation. There were no startling innovations, and many of the suggestions for a constructive adjustment of railroad relationships then being widely discussed were entirely ignored. It rejected the plan of federal incorporation; it failed to prescribe any specific rule of rate-making; it did not provide for a "guaranty" of earnings of any sort; no provision was made for the distribution of excess profits, the strong and weak road problem being left for solution through the Commission's authority over mergers and consolidations; no new machinery was set up for the adjustment of disputes between the carriers and their employees, and no attempt was made to define public policy with regard to the paramount necessity of maintaining continuity in the transportation service. The

inadequacy of the measure sprang primarily from its failure to envisage the railroad problem in terms of a positive, constructive effort to rehabilitate the American transportation system under private management.

During the summer months a sub-committee of the House Committee on Interstate and Foreign Commerce, with Representative Esch as chairman, held hearings on the Esch-Pomerene bill, and these hearings finally resulted in the formulation of a new bill, which was reported to the entire Committee on October 30, and to the House of Representatives on November 10, 1919.[8] The bill was given right of way, and active discussion of its terms was continued from the 11th to the 17th of the month. Opposition and difference of opinion were centered chiefly in the following elements of the problem: whether or not any extension of authority should be granted to the Interstate Commerce Commission; whether Federal Control should be immediately terminated upon the passage of the act; whether the indebtedness of the railroads to the Government because of capital expenditures should be funded, and if so, what methods should be employed and what terms should be specified; whether the guaranteed standard return, as under Federal Control, should continue for the first six months following the restoration of private management; whether the level of rates prevailing at the termination of Federal Control should remain unchanged upon the return of the roads to their owners; what provision, if any, should be incorporated for a rule of rate-making; what further limitations should be imposed upon the scope of the long-and-short-haul clause; what attitude should be adopted toward railroad labor controversies. In its main outlines this measure, like the original Esch bill, merely constituted an elaboration of the then-existing principles and machinery of regula-

[8] The sub-committee which drafted the House Committee bill consisted of Representatives John J. Esch of Wisconsin, Chairman, Thetus W. Sims of Tennessee, Edward L. Hamilton of Michigan, Samuel E. Winslow of Massachusetts, and Alvin W. Barkley of Kentucky.

tion. Though much more comprehensive than the first measure, it attacked the problem in traditional fashion, being largely free of bold strokes or novel features. It still remained, fundamentally, an expression of the prevailing views of the Interstate Commerce Commission.

The Esch bill was passed by the House of Representatives on November 17, 1919, and was immediately sent to the Senate. We must now trace briefly the development, in the Senate, of the Cummins bill, which, together with the House measure, provided the foundation and chief substance of the Transportation Act of 1920.

The Senate Hearings on the railroad problem were held from January 3, to February 21, 1919. The first result of the investigation was the submission by a sub-committee of the Committee on Interstate Commerce of the original Cummins bill, which was introduced into the Senate on September 2, 1919.[4] Just as the first Esch bill served as the basis of the later and more important House measure, so this Cummins bill was the foundation of the subsequent Senate measure. It will be useful, therefore, to note briefly its essential features.

It provided for the return of the roads to their private owners, and formulated principles and machinery for their regulation. A Transportation Board was to be created, charged with the duty of making continuous investigation and report to the Interstate Commerce Commission respecting the adequacy of railroad rates and fares, transportation needs and facilities, the state of railroad credit, and such other matters as concern the public interest in connection with the transportation industry. Provision was made for the compulsory consolidation of the existing railroad lines into not less than twenty and not more than thirty-five separate and distinct

[4] The sub-committee which drafted the Senate Committee bill consisted of Senators Albert B. Cummins of Iowa, Chairman, James E. Watson, of Indiana, Miles Poindexter of Washington, Joseph T. Robinson of Arkansas, and Atlee Pomerene of Ohio.

systems, the plan and arrangements of the mergers to be made by the Transportation Board subject to the approval of the Interstate Commerce Commission. In addition, the Board was authorized to relieve traffic congestion, diverting goods not specifically routed by the shipper from one carrier to another, and in its discretion compelling the joint use of terminals and other facilities. Security issues were placed under the exclusive control of the Federal Government. The Commission was directed to divide the country into rate districts, and after hearing, to determine the schedules of rates that would be adequate to provide a fair return on the capital invested in each district, the certificate of the Board as to the amount of revenue necessary for the various groups of roads to constitute *prima facie* evidence of the matter in proceedings before the Commission. It was further provided that the excess earnings over a fair return realized by any carrier were to be paid to the Transportation Board, one-half of the amount to be used for the betterment of labor conditions among railroad employees and the remainder to be applied to the purchase of equipment or for the extension of loans to the carriers. The Commission was authorized to prescribe minimum as well as maximum rates, and the period of rate suspension, pending investigation, was reduced to five months. It was provided that the board of directors of each railroad corporation should include in its membership two representatives of the classified employees and two representatives of the public. A Committee on Wages and Working Conditions composed of an equal number of representatives of the railroad employees and of the carriers was to be created for the consideration of labor disputes. The decisions of this Committee, when approved by the Transportation Board, were to be final; in case of disagreement, disputes were to be referred to and settled by the Board. Agreements between railroad employees which result in the interruption of the transportation service were declared to be illegal.

This first Cummins bill, unlike the original Esch bill, was

an attempt to apply constructive imagination to the solution of the railroad problem. It was distinctive in many of its features, and not a mere outgrowth of past effort. Its provisions for compulsory consolidation reflected a recognition of the far-reaching importance of solving the strong and weak road problem, as well as an appreciation of the large benefits to be derived from greater operating unity. It recognized the paramount necessity of maintaining continuity of the transportation service, and attacked the question in courageous, if unduly revolutionary, fashion. In providing for labor as well as public representation on the directorates of the carriers, an important step was taken toward the substitution of the preventive path of administrative discretion for the remedial expedient of legal rule in the adjustment of the relationship between public and private interests. While it is questionable whether the creation of a Transportation Board was an essential addition to the administrative machinery of regulation, the delimitation of duties and responsibilities between the newly proposed Board and the Interstate Commerce Commission was formulated along well-recognized functional lines. The provisions as to rate-making and for the distribution of excess earnings, while not altogether adequate, were a decided advance upon previous federal policies. On the whole the measure gave promise of a vigorous and positive reconstitution of the system of regulation.

The full Senate Committee on Interstate Commerce held almost daily sessions on the bill as originally submitted by Senator Cummins, from September 2 to October 23. Many amendments were made, and on the latter date a new bill was introduced, to supersede the original Senate measure. The Senate Committee submitted its report on this bill November 10, 1919, Senator Robert M. LaFollette of Wisconsin filing a minority report. Senator Cummins, on behalf of the Committee, confined himself almost entirely to a consideration of those parts of the bill "which propose legislation along lines distinct from those which have already been attempted."

His primary attention, therefore, was directed to the problem of funding the railroad indebtedness to the Government, the necessity of creating a Transportation Board, the question of compulsory consolidation, the character of the legislative basis of rate-making, the labor provisions and the anti-strike clause. In his minority report Senator LaFollette attacked the bill on the basic ground that it provided for immediate return of the roads to private management, and also voiced vigorous opposition to the proposed rule of rate-making, to the projected procedure for the control of security issues, and to the proposed control of labor relationships.

Debate on the Cummins bill began in the Senate on December 2, 1919, immediately after the reconvening of Congress and lasted till December 20. In the debate on the floor of the Senate opposition was centered on the provisions for the immediate return of the roads to their private owners, for the inclusion of a guaranty during a specified term following their return, for making available a loan fund for the use of the railroads, for the creation of a Transportation Board, for the compulsory consolidation of the carriers, for the establishment of a rule of rate-making, for the arbitration of labor disputes, and for the enactment of an anti-strike clause.

In the meantime the Esch bill, which had been passed by the House of Representatives on November 17, was submitted to the Senate for action. On motion of Senator Cummins the Senate bill was substituted for the House bill, and after a rejection of the amendment proposed by Senator LaFollette for the extension of Federal Control for a period of two years, the Cummins bill (as an amendment to the House measure) was passed by the Senate on December 20, 1919. The two bills were then referred to a joint Conference Committee of the two houses for the conciliation of their differences.

In view of the fact that a detailed analysis of the Transportation Act as passed, which resulted from the adjustment

of the differences between the House and Senate measures, will be presented in subsequent pages, it is unnecessary to set forth at length the specific provisions of the Esch bill and the Cummins bill. It will be useful, however, to indicate briefly the chief points of agreement between them, their distinctive conflicts of viewpoint, and the character and direction of the compromises that were reached.

With regard to a number of important elements in the solution of the railroad problem, the Esch bill and the Cummins bill were in substantial agreement. They both provided for the return of the roads to private management as soon as the pending legislation was enacted. By way of transitional safeguards, provision was included in both measures for the continuance of the rate schedules prevailing at the termination of Federal Control, and explicit procedure was outlined for necessary advances. In addition, the guaranteed standard return was to remain operative, for such roads as chose to avail themselves of its terms, for a period of six months immediately following the restoration of private management. The need of federal regulation of security issues and capital expenditures was recognized in both measures—the function of supervision being vested in the Interstate Commerce Commission by the Esch bill and in the Transportation Board by the Cummins bill. As a complement to the power over security issues, and as an aid to effective public control over the financial return of the carriers, authority to regulate extensions was vested in the Government, the House bill prohibiting railroad extensions without a certificate of convenience and necessity from the Commission, and the Senate bill requiring similar approval of the Board. The rate-making power, in both measures, was extended to include minimum as well as maximum rates, and also joint rates and their division or apportionment. The dominance of federal authority in rate regulation, in cases involving conflict with the action of state legislatures or administrative bodies, was accorded explicit recognition. Many of the provisions relating to

service, and to such measure of unification as falls short of actual consolidation of railroad systems, reflected similar agreement between the two houses. The power to order acquisition of adequate equipment and facilities was vested in the Government, as well as authority over rules and regulations governing car service. In time of emergency, including periods of equipment shortage and traffic congestion, the federal administrative agency was authorized to require the use of equipment without regard to ownership, providing schedules of charges for such use, and to direct priorities in freight shipments, imposition of embargoes, resort to the permit system, and the joint use of terminal facilities.

The differences between the two measures were many, and of varying importance. The most significant of them arose out of the distinctive features of the Senate enactment. They concerned four outstanding problems: the character of the adjustments to be made in the machinery of regulation; the public attitude to be adopted toward the maintenance of competition and the constructive stimulation of cooperative arrangements; the financial safeguards—from the standpoint both of the carriers and the public—to be included in the new legislation; and the question of labor relationships.

With regard to machinery of regulation the House and Senate measures were radically divergent in approach. The Esch bill centered all authority, as in the past, in the Interstate Commerce Commission, merely increasing its membership from nine to eleven. The Commission was to retain all the functions vested in it by the Act to Regulate Commerce, as amended, and in addition was to exercise the further duties and responsibilities involved in the substantive changes introduced by the new legislation. The Cummins bill, on the other hand, proposed a radical redistribution of authority. In the first place, as a foundation for the functioning of the projected regulatory machinery, provision was made for federal incorporation of all railroads engaged in interstate commerce, with the added requirement that each corporation shall include in its board of directors two

representatives of the classified employees and two representatives of the Government. The Interstate Commerce Commission was to exercise power to fix just, reasonable, and adequate rates and charges, to determine the valuation of railway properties, to prescribe uniform accounting systems, to approve consolidations, and to perform all other functions traditionally vested in it except those transferred to the new Transportation Board. Provision was then made for the creation of a Transportation Board, composed of five members, to be appointed by the President. The jurisdiction of the Board was very extensive. It was vested with authority—either by way of transfer from the Commission or through the extension of the scope of public control—to exercise, among others, the following important functions: to prepare and adopt, subject to the approval of the Interstate Commerce Commission, the plan of railroad consolidation contemplated by the measure; to conduct continuous inquiry concerning transportation needs and railroad facilities, the state of railroad credit, and the capital demands of the carriers; to exercise exclusive and plenary jurisdiction over the issuance of securities; to administer such specific legislative enactments as the car service act, the safety appliance act, the boiler inspection act, and the hours of service act; to provide, when necessary, for the redistribution of traffic and the joint use of terminals and other facilities; to serve as a board of final appeal in labor disputes; to represent the public interest in hearings before the Interstate Commerce Commission; and to recommend to Congress, from time to time, such transportation measures as are calculated to promote the public welfare.

Both measures modified the traditional policy of enforced competition and provided for orderly coöperation between the carriers. But the method, extent, and conditions of coöperation were fundamentally different. The provisions of the Esch bill were permissive in character. The consolidation or merger of two or more railroad properties, or the pooling of their traffic, earnings, or facilities, was made subject to the approval of the

Interstate Commerce Commission, such approval to be granted when the projected measure of unification is deemed to be in the public interest. The Cummins bill, on the other hand, provided for compulsory consolidation of all the railroads into not less than twenty and not more than thirty-five transportation systems, in conformity with a plan devised and adopted by the Transportation Board, with the approval of the Interstate Commerce Commission, each system to be owned and operated by a distinct federal corporation. Consolidation was to be voluntary if accomplished within a period of seven years and compulsory thereafter. Whether voluntary or compulsory, the consolidations were required to be in harmony with the general plan adopted by the Board, the capitalization of the various systems, in each instance, not exceeding the value of the constituent properties as officially determined; and the arrangement of the new systems being so adjusted, with reference to existing conditions of competition and channels of trade, as to enable each corporation, with uniform rates and under efficient management, to earn substantially the same rate of return on the value of its property. The Cummins bill thus contemplated an extensive program of unification, both as an aid to operating efficiency and as a means of solving the problem of the strong and weak roads.

The financial provisions of the two measures were strikingly divergent. The Esch bill defined no rule of rate-making, provided no scheme for the creation of railroad groups or rate districts, included no government "guaranty" as part of permanent railroad policy, and established no principles or machinery for the appropriation or use of excess earnings. Rate regulation—extended to include minimum rates, and joint rates and their apportionment—was to be exercised on the traditional basis by the Interstate Commerce Commission. The financial provisions of the Cummins bill involved a marked departure from traditional policy. In the regulation of rates and charges, the Interstate Commerce Commission was directed, in the first place, to divide the country into rate districts and the railroads

into rate groups. The Commission was then enjoined to exercise its authority in accordance with a statutory rule providing that the railroads as a whole, in each rate group, will be allowed to earn an aggregate annual net operating income equal as nearly as may be to five and one-half per cent. on the total value of their property used in the transportation service, and that they may be allowed to retain an additional one-half of one per cent. for investment in non-productive improvements that cannot be capitalized. In 1925, and at intervals of five years thereafter, the Commission was authorized to adopt such modifications of the five and one-half per cent. basis of return as might in its judgment be deemed necessary or desirable. Furthermore, each carrier was required to create an independent reserve fund, through accumulation of excess earnings, for the support of its own credit, and a general railroad contingent fund was to be created, largely out of the excess earnings of the more prosperous roads, for the support of the transportation system as a whole. The carriers could draw upon their own reserves for the payment of interest or dividends whenever, and to such extent as, their operating income is not equal to the six per cent. provided for in the rule of rate-making. The general railroad contingent fund was to be administered by the Board for the "furtherance of the public interest in railway transportation," more especially for diminishing congestion and interruption of the service, through the purchase, lease, or rental of equipment and facilities to be used by the roads, or through the extension of loans to such carriers as needed and merited the strengthening of their independent credit position.

Finally, the House and Senate enactments differed in their attitude toward labor relationships. The Esch bill provided for the creation of three Boards of Adjustment, each authorized to hear and decide in the first instance all controversies between the railroads and various classes of employees with regard to wages, hours of service, and conditions of employment, and three Commissions on Labor Disputes, authorized to render final decisions on all matters referred to them by the

three Boards of Adjustment. Upon failure to reach an agreement in any Board of Adjustment one-half of its members were authorized to submit the matter in controversy to the appropriate Commission on Labor Disputes. Each of these Boards of Adjustments and Commissions on Labor Disputes was to be composed of an equal number of representatives of specified classes of railroad labor and of the railroad executives. It was provided that in all labor controversies the ordinary methods of private settlement shall first be resorted to, the public machinery being invoked only when a clear need emerges for the services of these Boards and Commissions, and no penalties were imposed for failure to utilize these instrumentalities for the adjustment of labor relationships. By comparison with these stipulations for the voluntary public settlement of labor controversies, the provisions of the Cummins bill were much more far-reaching and incisive. Provision was made for the creation of a Committee of Wages and Working Conditions and of three Regional Boards of Adjustment, these agencies, in each case, being equally representative of the employees and the carriers. The jurisdiction of the Committee was to extend to all matters involving wages and working conditions among railway employees, and to the settlement of controversies referred to it by the Regional Boards of Adjustment because of failure to reach a decision. Decisions of the Committee were to take effect when approved by the Transportation Board, and in case of deadlock in the Committee, controversies were to be referred to that Board for final settlement. There was a specific statutory declaration that wages and working conditions in the business of the carriers shall be just and reasonable, and the Committee was directed, in determining the justice and reasonableness of labor adjustments, to take into consideration the scale of wages paid for similar kinds of work in other industries, the relation between wages and the cost of living, the hazards of the employment, the training and skill required, the degree of responsibility involved, and the character and regularity of the employ-

ment. The Regional Boards of Adjustment were to be located in such places and have jurisdiction over such territory as might be prescribed by the Transportation Board, and were to exercise authority over complaints, grievances, and disputes arising in ordinary railway operation other than controversies relating to wages and working conditions, whenever a voluntary settlement could not be reached by the parties directly in interest. Finally, penalties were provided for failure or refusal to obey the orders of the Committee of Wages and Working Conditions or of the Regional Boards of Adjustment, and it was declared to be unlawful for two or more persons to enter into an agreement to hinder, restrain, or prevent the operation of trains or other railroad facilities—thus prohibiting both strikes and lockouts—or to aid or abet such interruption or interference with the transportation service.

We have seen that the Senate and House bills were referred to the joint Conference Committee for consideration, conciliation, and report, immediately after the passage of the Cummins bill on December 20, 1919. The Committee held sessions on the measure from December 22 to February 18, 1920. In the meantime, by presidential proclamation of December 24, 1919, the Government announced definitely that the roads would be restored to their private owners on March 1, 1920. This announcement stimulated the efforts of the Conference Committee to reach a satisfactory adjustment of the differences between the two measures. The Conference bill was reported out of Committee on February 18, 1920, although debate had begun in the House on certain provisions that were known to have been incorporated in the compromise measure as early as February 14. Debate in the Senate followed immediately upon the submission of the Conference report. The discussion in both houses, in so far as it passed beyond conventional party opposition, was centered around the provisions of the new measure which represented conciliation and compromise between the original stipulations of the Esch bill and the Cummins bill.

On February 21, 1920, the Conference bill was passed in the House of Representatives, without amendment, by a vote of 250 to 150. The affirmative votes were cast by 205 Republicans and 45 Democrats, while the votes in opposition were cast by 125 Democrats, 23 Republicans, and 2 members unaffiliated with the major political parties. In the Senate the Conference report was adopted and the bill, as submitted, passed on February 23, 1920. The vote was 47 to 17, the affirmative being supported by 32 Republicans and 15 Democrats and the negative by 14 Democrats and 3 Republicans. The Conference bill, as passed by Congress, was sent to President Wilson on February 25. After submitting the measure for expressions of opinion to Attorney-General Palmer and Director-General Hines, the President signed the bill on February 28, 1920, and it thereby became the Transportation Act of 1920.[5]

The Esch-Cummins Act preserved the form and structure of the House measure, and its substantive provisions were also a much closer approximation to the Esch bill than to the Cummins bill. The Senate receded from most of its distinctive policies. While there was much compromise between the House and Senate conferees with regard to relatively unimportant provisions, the Senate yielded on most of the issues possessing major significance. The new legislation emerged, in most respects, as an outgrowth of established principles and tried experience. All but one of the novel or so-called "revolutionary" features of the Cummins bill were rejected. The financial provisions of the Act constitute a virtual adoption of the stipulations of the Senate measure. The price of their acceptance by the House conferees was agreement by the Senate not to press its claims for radical change in the organization of the carriers, in the machinery of their regulation, or in the legal attitude toward the activities of railroad labor.

The American people seemed weary of the extensive government participation in economic enterprise and the intimate public control of industrial relationships that had accompanied the

[5] Public Act No. 152, Sixty-sixth Congress.

war effort, and opinion was inhospitable to the adoption of untried experimental policies as part of the permanent railroad adjustment. Moreover, many of the proposals of the Senate measure were bitterly resented by special interests. Organized labor as a whole, in addition to the vast body of railway employees, viewed with deep concern the projected encroachment upon the wage-earner's "inherent right" to strike. The specific limitation of railroad returns and the recapture of excess earnings by the Government naturally encountered the vigorous, if unavailing, opposition of railroad executives and security holders. The governing and regulatory officials of the states, and the surviving champions of the principle of state rights, looked with marked disfavor upon the possible adoption of the policy of federal incorporation. And the advocates of "business freedom"—a numerous and influential group—regarded as fundamentally restrictive in spirit the possible increase of public administrative agencies, the actual participation of labor and the Government in the directing machinery of the railroad corporations, and the public formulation of plans of railroad consolidation and their compulsory imposition upon the carriers. The time was not ripe, apparently, for the wholesale adoption of novel principles and untried expedients of railroad regulation. Many extensions of public authority were incorporated into the Transportation Act, a number of inconsistencies and hampering restrictions of traditional policy were eliminated, and some new channels of constructive approach were cautiously entered upon. But for the most part the modified superstructure was built on the old foundations. These circumstances may prove to constitute both the strength and the weakness of the new legislation. The difficulties of sharp transition may have been avoided, but the persistence of wide differences of opinion as to the proper mode of solving the railroad problem, together with the compromise character of the actual adjustment, may portend lack of permanence and stability in the enacted settlement.

We shall now undertake a systematic analysis of the out-

standing provisions of the Transportation Act. An interpretation of the character of the adjustment will be reserved for the following chapter.

§2. *The Transitional Safeguards*

The Transportation Act first made provision for the winding up of matters arising out of public operation, and established safeguards deemed essential for the period of transition to private management.[6] While these stipulations, dealing with the termination of Federal Control, now possess, for the most part, a purely historical interest, they were exceedingly important to the carriers, and constitute a significant and integral part of the legislation.

Federal Control was declared to terminate March 1, 1920, and thereafter the President was denied the right to exercise any of the powers vested in him by the Federal Control Act, except that the authority of the Government to take possession and assume control of the transportation system as a war measure, conferred upon the President by the Act of August 29, 1916, was specifically reserved. The President was then directed to adjust and settle all matters, including compensation, arising out of Federal Control. For these purposes the Act made available all balances in the revolving funds theretofore appropriated, all receipts from the operation of the properties, all repayments of loans to the Government by the railroad corporations, and in addition, the sum of $200,000,000 therein appropriated.[7]

In effecting settlement of compensation with carriers whose properties had been operated by the Government but with which no contracts had been made, the President was empowered, upon the request of these carriers, to pay such part of what he deemed fair compensation as the carrier might

[6] Transportation Act, 1920, Title II, Termination of Federal Control, Secs. 200-210.

[7] *Ibid.*, Secs. 200, 202.

need for the payment of interest, taxes, and other corporate charges and expenses specified in the standard contract, accruing during the period for which compensation was due, and also such amounts as were required for the payment of dividends applicable to such period. While the acceptance of the benefits of these provisions was not to deprive the carrier of additional compensation, under the Federal Control Act, it was to be construed as acquiescence with the terms of settlement provided by law, and was to obligate the carrier to repay, with interest at 6 per cent., such part of the advances as exceeded the amount of compensation determined to be lawfully due to the carrier in subsequent proceedings.[8]

Provision was also made for the reimbursement of "deficits" in railway operating income suffered during the period of Federal Control, or any part thereof, by the carriers which operated their own railroads or systems of transportation, independently of the United States Railroad Administration. In view of the extraordinary conditions, both as to revenue from rates and expenses of operation, prevailing during the twenty-six months of Federal Control, the obligation was assumed by the Government to pay such carriers an amount determined by the difference, "for every month of the period of Federal Control during which its railroad or system of transportation was not under Federal operation," between its "Federal control return" and its "test period return" for the corresponding month. Specific and detailed procedure was enacted for the computation of these "deficits," involving the balancing of a series of monthly credits to the carriers and to the United States, such sum being payable to each carrier as resulted from the excess of its credits over the credits of the Government.[9]

Finally, necessary machinery was created and legal procedure was outlined for the prosecution of causes of action arising out of Federal Control. Actions at law and proceedings in equity or in admiralty which, but for the intervention of

[8] *Ibid.*, Sec. 203.
[9] *Ibid.*, Sec. 204.

Federal Control, could have been brought against the carrier immediately involved, were required to be brought, not later than two years after the enactment of the statute, against an agent of the United States to be appointed by the President within thirty days after the passage of the act. The litigation and adjustment of claims under this appointment constitute the chief duties of the Director-General of Railroads since the restoration of private management. Complaints for reparation because of damage resulting from the collection or enforcement, under Federal Control, of unjust, or unreasonable, or unduly discriminatory rates, fares, charges, classifications, regulations, or practices might be filed with the Interstate Commerce Commission, against the agent designated by the President, the petition to indicate the carrier involved. The Commission was authorized to hear and decide such complaints in accordance with the provisions of the Act to Regulate Commerce, all reparations and awards rendered against the agent of the Government to "be promptly paid out of the revolving fund." [10]

The foregoing provisions concern, primarily, matters of procedure involved in the winding up of Federal Control. They deal with events that transpired previous to the termination of the period of government management, and their influence upon the future is limited to the adjustment of accrued financial claims of private individuals and particular carriers. In addition to these essential stipulations, however, the Transportation Act incorporated certain transitional safeguards that constitute important elements of railroad policy rather than mere administrative details. Though some of them have now ceased to operate directly, they have all exerted and are continuing to exert a strong influence upon the current status and future development of the transportation industry. These transitional safeguards provided for the funding of the indebtedness of the carriers to the United States Government;

[10] *Ibid.*, Sec. 206.

for the extension of the guaranty of a standard return after the termination of Federal Control; and for the provision of funds to be used for new loans to the railroads.

In the first place, in order to relieve the carriers from the necessity of repaying to the Government immediately the capital expenditures incurred in their behalf in the course of Federal Control—and thereby strengthen their current credit position, and enable them to formulate more freely and deliberately their future financial plans—provision was made for the funding of accrued indebtedness. The President was directed to ascertain the amount due to the United States from each carrier because of additions and betterments properly chargeable to the capital account, the amount of indebtedness of such carrier to the Government otherwise incurred, and the amount due to each carrier from the United States arising out of Federal Control. The obligations of the Government to the carriers might be set off against the indebtedness of the carriers to the United States as deemed wise by the President, but only to the extent permitted by the standard contract or other agreements made with the carriers, or in the absence of such contracts or agreements, to such extent only as will not deprive the carrier of the sums necessary for the payment of interest, taxes, and corporate charges and expenses accruing during Federal Control, together with the amounts required to cover dividends declared and paid during the course of public operation or applicable to any part of that period; and provided, further, "that such right of set-off shall not be exercised unless there shall have first been paid such sums, in addition, as may be necessary to provide the carrier with working capital in amount not less than one twenty-fourth of its operating expenses for the calendar year 1919." The remaining indebtedness of the carrier to the Government was to be funded, at the request of the carrier, for a period of ten years or less (at the option of each railroad corporation) with interest at the rate of 6 per cent., payable semi-annually, the privilege being reserved to each carrier to pay the whole or any part of the

indebtedness on any interest payment date. This funded debt was to be supported by security, within the discretion of the President, "in such form and upon such terms" as he might prescribe. The railroads were empowered to issue the necessary evidences of indebtedness "without the authorization or approval of any authority, State or Federal, and without compliance with any requirement, State or Federal, as to notification." [11]

Secondly, in order to reduce the dangers of financial embarrassment and possible failure of railroad corporations that might accompany the transition to private management—in view of the obvious inadequacy of the existing rate level and the relative permanence of prevailing operating costs—it was deemed necessary to continue, temporarily, the guaranty of earnings that had prevailed during the period of Federal Control. It was first provided, as a basis for the extension of the guaranty, that all rates in effect at the termination of Federal Control shall remain in force until changed by competent authority; that no reduction in such rates shall be made prior to September 1, 1920, without the approval of the Interstate Commerce Commission; and that all existing divisions of joint rates shall continue to be operative until changed by mutual agreement between the interested carriers, or by public authority.[12] These provisions were designed to assure the carriers of the benefit of the rate increases that had been made during the period of Federal Control, and to prevent the improper manipulation of charges, during the transitional period for which the guaranty was to be extended, to the advantage of the carriers and at the expense of the Government. It was then provided, substantially, that the Government would guarantee to the carriers, for a period of six months beginning March 1, 1920, the equivalent of the standard return paid to them during Federal Control. In the case of carriers with which contracts for compensation had been made under the Federal Control Act, the

[11] *Ibid.*, Sec. 207.
[12] *Ibid.*, Sec. 208.

amount guaranteed for the transitional six months was to provide a railway operating income equal to not less than one-half of the annual compensation contracted for, or such proportion of any lump sum agreed upon as the six-month period bears to the entire period of Federal Control. In the case of carriers with which no contracts for compensation had been made, but which were entitled to the standard return provided in the Federal Control Act, the amount of guaranty was to equal one-half of the just annual compensation as estimated by the President, or as determined in subsequent proceedings. The carriers were free to operate without the protection of the Government guaranty, or to avail themselves of these provisions by filing with the Interstate Commerce Commission, not later than March 15, 1920, a written statement accepting the terms and conditions of the guaranty as specified. Such acceptance obligated the carriers to pay into the Treasury of the United States any excess in actual return above the minimum railway operating income guaranteed by law, except that any carrier might retain out of such excess earnings "any amount necessary to enable it to pay its fixed charges accruing during the guaranty period." Upon application to the Interstate Commerce Commission, carriers were enabled to secure advances, from time to time, of such sums, "not in excess of the estimated amount necessary to make good the guaranty," as might be required in order to meet fixed charges and operating expenses, upon agreement by the carriers that they would repay to the United States, with interest at 6 per cent., any amounts received from such advances in excess of the guaranty as subsequently determined.[18]

Finally, for the purpose of enabling the railroads "properly

[18] *Ibid.*, Sec. 209. The American Railway Express Company was also guaranteed against a deficit in operating income during the period of six months immediately following the termination of Federal Control, on substantially the same terms as above, with the proviso, however, that not more than 50.25 per cent. of the gross express revenue shall be included in operating expenses as a charge for payment of express privileges to carriers on whose lines the express traffic is carried. (Sec. 209 [i].)

to serve the public during the transition period immediately following the termination of Federal Control," provision was made for the extension of new loans to the carriers. Applications for these loans were to be filed with the Interstate Commerce Commission at any time after the passage of the Transportation Act, but not later than two years after the resumption of private management, and were to set forth "the amount of the loan and the term for which it is desired, the purpose of the loan and the uses to which it will be applied, the present and prospective ability of the applicant to repay the loan and meet the requirements of its obligations in that regard, the character and value of the security offered, and the extent to which the public convenience and necessity will be served." The Commission might require such further facts with respect to the physical situation, ownership, capitalization, indebtedness, contract obligations, operation, and earning capacity of the carrier as it might deem pertinent to its investigation. Authority was then vested in the Commission to certify to the Secretary of the Treasury its findings of fact and its recommendations with regard to the amount of the loan, the time (not exceeding five years) within which it is to be repaid, the character of the security offered, and the terms of the borrowing. The Secretary of the Treasury was empowered, at any time within twenty-six months after the termination of Federal Control, to grant these loans, not exceeding, in each case, the maximum amount recommended by the Commission, out of any moneys in the revolving fund provided for this purpose. The loans thus extended were to bear interest at 6 per cent., payable semi-annually; and their duration, the security which was to be deemed adequate, the conditions of the borrowing, and the form of the obligation to be entered into, were all to be determined and prescribed by the Secretary of the Treasury. The sum of $300,000,000 was appropriated as a revolving fund for the making of these loans, and the carriers were empowered to issue such evidences of indebtedness as might be necessary in connection with this bor-

rowing without further authorization or approval by the state or federal governments.[14]

We shall now analyze the changes in permanent regulative policy introduced by the Transportation Act. It will prove useful to follow the procedure adopted in earlier chapters in connection with the presentation of the essentials of reconstructive policy. Accordingly, the provisions of the new legislation will be divided into three main groups: those dealing with transportation and traffic arrangements (involving matters of unity of operation and railroad service); those dealing with financial safeguards and adjustments (involving the question of rates, credit, and financial return); and those dealing with labor relationships (involving the problem of railroad labor and continuity of operation).

§3. *Unity of Operation and Railroad Service*[15]

All of the provisions of the Transportation Act dealing with competition, coöperation, consolidation, and extension of railroad systems, and with the regulation of transportation service, were enacted as amendments to the Interstate Commerce Act, introducing changes in existing policy or adding new principles and machinery of public supervision.[16] The corrective

[14] *Ibid.*, Sec. 210. There are also provisions touching the disposition and operation of government-owned boats on inland waterways. All boats, barges, tugs, and other transportation facilities acquired by the United States under the Federal Control Act (except such properties as are part of railroad systems) are transferred to the Secretary of War for operation and such further construction as may be deemed necessary, so that the lines of inland water transportation established during Federal Control shall be continued. Government interests in Mississippi River shipping are also transferred to the Secretary of War. The operation of all of these properties is made subject to the provisions of the Act to Regulate Commerce as amended and of the Shipping Act of 1916 "in the same manner and to the same extent as if such transportation facilities were privately owned and operated." (Sec. 201.)

[15] *Cf.* Ch. VII, *supra.*

[16] Transportation Act, 1920, Title IV, Amendments to Interstate Commerce Act, Secs. 401-403, 405 (3) (4), 407-408.

provisions reversed or modified the traditional emphasis upon enforced competition, and the constructive provisions established a basis for the development of an adequate transportation service.

In the first place, the restrictive prohibitions of the anti-pooling clause of the Act to Regulate Commerce were so amended as to permit the pooling of freights between two or more competing railroads, or the division between them of their aggregate or net earnings, upon specific approval of the Interstate Commerce Commission. Whenever the Commission, upon application of a carrier or carriers or upon its own initiative, deems such division of traffic or earnings to be in the interest of better service to the public or of economy in operation, but "will not unduly restrain competition," it is empowered to approve and authorize these pooling arrangements, with the assent of all the carriers involved, and to specify the rules, regulations, terms, conditions, and consideration as between the carriers, which it finds to be just and reasonable. Similar relaxation of existing restrictions was provided with reference to the control of one carrier by another. Whenever the Commission, upon application, determines after hearing that the acquisition by one carrier of the control of any other carrier or carriers, through lease or purchase of stock or in any other manner not involving consolidation into a single system, will be in the public interest, it may approve and authorize such acquisition under such terms and conditions as it may deem just and reasonable. In order to legalize these provisions, as well as the stipulations with regard to railroad consolidation to be subsequently explained, the carriers affected were relieved from the operation of the "antitrust laws" and of all other legal restraints or prohibitions, state or federal, to the extent necessary to enable them to carry out such plans as may be authorized and execute such orders as may be issued.[17]

[17] *Ibid.*, Sec. 407, amending Sec. 5 of the Interstate Commerce Act, pars. (1), (2), (3), (8).

Provision was then made, by way of constructive development of the traditional policy of regulation, for the orderly consolidation of the railroads and the gradual reduction of the prevailing conditions of unlimited multiple ownership. The Interstate Commerce Commission is directed to prepare and adopt a plan for the consolidation of the railway properties of the continental United States into a limited number of systems. In the development of this plan of consolidation the Commission is enjoined to preserve competition as fully as possible, and to maintain, wherever practicable, the existing routes and channels of trade and commerce. Moreover, subject to the above requirements, it is stipulated that the railroad systems are to be so arranged that the cost of transportation, as between competitive groups and with reference to the values of the plant and equipment through which the transportation service is rendered, shall be the same, as far as may be, in order that the employment of uniform rates in the movement of competitive traffic may enable all of the transportation systems under efficient management, to earn substantially the same rate of return upon the value of their respective properties. The Commission is directed, when it has agreed upon a tentative plan, to give it due publicity and hold hearings thereon, after which the plan of consolidation as finally determined must be adopted and published. While power is reserved in the Commission, upon application or on its own initiative, to "reopen the subject for such changes or modifications as in its judgment will promote the public interest," the consolidations provided for by law are required to be in harmony with the plan adopted by the Commission.[18]

The plan of the Interstate Commerce Commission is thus made the primary basis for voluntary railroad consolidations. It is lawful for two or more carriers to merge their railroad properties, previously distinct in ownership and independent in operation, into a single corporate entity for unified control and

[18] *Ibid.*, Sec. 407, pars. (4), (5).

management: provided, first, that the proposed consolidation is "in harmony with and in furtherance of the complete plan" of the Commission and is approved by it; and second, that the outstanding securities at par of the company becoming the owner of the consolidated properties do not exceed the value of these properties as determined by the Commission. Whenever two or more railroad corporations propose a consolidation of this character, they must present an application therefor to the Commission. The Commission must then give due notice to all parties concerned, including "the Governor of each state in which any part of the properties sought to be consolidated is situated," and a public hearing must be held. If the Commission finds such consolidation to be in the public interest, and in accordance with the conditions specified above, it may authorize the consolidation, which may then be effected, "if all the carriers involved assent thereto, the law of any state or the decision or order of any state authority to the contrary notwithstanding."[19]

As a further aid toward the improvement of competitive railroad conditions, extensions and abandonments, as well as consolidations, were made subject to the authority of the Interstate Commerce Commission. After the expiration of ninety days from the effective date of the act, no railroad can undertake the extension of its line, or the construction of a new line, or the acquisition or operation of any new or extended line unless a certificate of public convenience and necessity shall first have been obtained from the Commission. In like manner, no railroad line or its operation may be abandoned without a similar certification that the public convenience and necessity permit the abandonment. The procedure to be followed in the treatment of applications for authority to extend or abandon railway lines is specifically indicated. The Commission is empowered to issue certificates as prayed for in the application of the carriers, or to deny the petition altogether, or to authorize the extension or abandonment of part of the lines involved and the

[19] *Ibid.*, Sec. 407, par. (6).

partial exercise of the rights and privileges prayed for, and it "may attach to the issuance of the certificate such terms and conditions as in its judgment the public convenience and necessity may require." Any construction, operation, or abandonment undertaken in violation of the foregoing provisions "may be enjoined by any court of competent jurisdiction at the suit of the United States, the Commission, any commission or regulating body of the State or States affected, or any party in interest;" and any carrier, officer, operating trustee, or agent "who knowingly authorizes, consents to, or permits" such violation is subject to punishment "by a fine of not more than $5,000 or by imprisonment for not more than three years, or both." [20]

Finally, in addition to the foregoing provisions directed toward the achievement of formal unification of railroad properties through supervision of consolidations and control of extensions, the Transportation Act expanded in notable measure the powers of the Federal Government in the regulation of railroad service. The new stipulations were chiefly incorporated into the Act to Regulate Commerce by way of amendments to the Esch Car Service Act of May 29, 1917. While nominally the new powers vested in the Commission are limited to the regulation of car service, the term "car service" is so broadly defined as to reach practically every aspect of the transportation function. "Car service," as employed in the Transportation Act, includes the use, control, supply, movement, distribution, exchange, interchange, and return of locomotives, cars, and other vehicles used in the transportation of property, including special types of equipment, and the supply of trains, by any

[20] *Ibid.*, Sec. 402, amending Sec. 1, of the Interstate Commerce Act as amended by the Car Service Act of May 29, 1917, pars. (18), (19), (20). The authority of the Commission conferred by these paragraphs does not extend to the construction or abandonment "of spur, industrial, team, switching or side tracks, located or to be located wholly within one state, or of street, suburban, or interurban electric railways, which are not operated as part or parts of a general steam railroad system of transportation." (*Ibid.*, par. [22].)

railroad carrier subject to the jurisdiction of the Federal Government.[21]

On this basis it is made the express duty of every carrier to furnish safe and adequate car service; to establish, observe, and enforce just and reasonable rules, regulations, and practices with respect to car service; and all unjust and unreasonable service adjustments are prohibited and declared to be unlawful. In the enforcement of the obligations of the carriers to provide safe and adequate service, the Commission is empowered after hearing, upon complaint or upon its own initiative, to authorize or order any carrier to acquire safe and adequate facilities for the performance of its duties as to car service or to extend its transportation lines, provided such extension is deemed to be reasonably required in the interest of public convenience and necessity, and provided further, that the expense involved in the extension of lines or acquisition of facilities "will not impair the ability of the carrier to perform its duty to the public." Neglect or refusal to comply with the Commission's orders in these respects is made subject to penalty.[22]

In the regulation of railroad service the Interstate Commerce Commission is authorized, in the first instance, to require carriers to file with it such rules and regulations concerning car service as they may have established and, in its discretion, to direct that these rules and regulations shall be incorporated in the schedules of rates and charges published by the railroads. But these service practices are subject to revision by the Commission. Either upon complaint or upon its own initiative, the Commission may, after hearing, establish reasonable rules, regulations and practices, and it may determine "the compensation to be paid for the use of any locomotive, car, or other vehicle not owned by the carrier using it, and the penalties or other sanctions for nonobservance of such rules, regulations or practices."[23]

[21] *Ibid.*, Sec. 402, par. (10).
[22] *Ibid.*, Sec. 402, pars. (11), (12), (21).
[23] *Ibid.*, Sec. 402, pars. (13), (14).

There is also specific provision for the use by one carrier of the terminal facilities of another carrier. The Interstate Commerce Commission is empowered to require such use of terminal facilities if it finds it to be in the public interest and practicable, "without substantially impairing the ability of a carrier owning or entitled to the enjoyment of terminal facilities to handle its own business." The carriers involved may determine the terms of compensation, or in case of disagreement, the Commission may fix just and reasonable compensation, "to be ascertained on the principle controlling compensation in condemnation proceedings"; and this compensation must be paid or adequately secured before the enjoyment of the use may be commenced. Where terminal facilities of one carrier are thus required to be used by another, and the owning carrier is not satisfied with the terms fixed or the compensation is not duly or promptly paid, such carrier is entitled to recover proper damages for such injury as may be sustained.[24]

The authority of the Commission over service standards as thus far described is applicable under normal railroad conditions. In the event of transportation emergency, the Commission is clothed with extensive additional powers, for the suspension of established regulations, for the prescription of cooperative arrangements, for the determination of traffic priorities, and for the control and distribution of freight shipments. Whenever, in the judgment of the Commission, shortage of equipment, congestion of traffic, or other emergency requiring immediate action exists in any section of the country, it is authorized, "either upon complaint, or upon its own initiative without complaint, at once, if it so orders, without answer or other formal pleading by the interested carrier or carriers, and with or without notice, hearing, or the making or filing of a report, according as the Commission may determine:

"(a) to suspend the operation of any or all rules, regulations,

[24] *Ibid.*, Sec. 405, amending Sec. 3 of the Interstate Commerce Act, pars. (3), (4).

or practices then established with respect to car service for such time as may be determined by the Commission;

"(b) to make such just and reasonable directions with respect to car service without regard to the ownership as between carriers of locomotives, cars, and other vehicles, during such emergency as in its opinion will best promote the service in the interest of the public and the commerce of the people, upon such terms of compensation as between the carriers as they may agree upon, or, in the event of their disagreement, as the Commission may after subsequent hearing find to be just and reasonable;

"(c) to require such joint or common use of terminals, including main-line track or tracks for a reasonable distance outside of such terminals, as in its opinion will best meet the emergency and serve the public interest, and upon such terms as between the carriers as they may agree upon, or, in the event of their disagreement, as the Commission may after subsequent hearing find to be just and reasonable;

"(d) to give direction for preference or priority in transportation, embargoes, or movement of traffic under permits, at such time and for such periods as it may determine, and to modify, change, suspend, or annul them;" and

(e) whenever the Commission believes that any carrier is unable, for any reason, to transport the traffic offered it so as properly to serve the public, "to make such just and reasonable directions with respect to the handling, routing, and movement of the traffic of such carrier and its distribution over other lines of road, as in the opinion of the Commission will best promote the service in the interest of the public and the commerce of the people, and upon such terms as between the carriers as they may agree upon, or, in the event of their disagreement, as the Commission may after subsequent hearing find to be just and reasonable." [25]

Both in the normal regulation of car service and in the enforcement of the extraordinary measures made necessary by emergency conditions, the orders of the Interstate Commerce Commission are made mandatory and their violation is subjected to penalty. The Commission may issue its directions through such agents or agencies as it may appoint or designate for the purpose, and it is the duty of the carriers—and of their

[25] *Ibid.*, Sec. 402, pars. (15), (16).

officers, agents, and employees—"to obey strictly and conform promptly to such orders or directions of the Commission." In case of failure or refusal to comply with the orders of the Commission, a penalty may be imposed of not less than $100 nor more than $500 for each offense, together with $50 for every day of the continuance of the offense,—these penalties being recoverable by the United States in a civil action.[26]

§4. *Rates, Credit, and Financial Return* [27]

We now enter upon an analysis of the financial provisions of the Transportation Act. In the main these provisions deal with the regulation of rates and charges with special reference to their influence upon transportation revenue and railway credit, and reflect their distinctive features in the principles and mechanism adopted for the determination and restriction of the rate of return. To this extent the stipulations of the new law are both novel and constructive in character. There are also numerous subsidiary provisions, however, introduced both by way of amendment and addition to the Interstate Commerce Act, which concern rate adjustments *per se,* or constitute a necessary basis for the proper maintenance of railroad credit and the satisfactory development of an adequate transportation service. These subsidiary provisions deal with principles governing the relativity of rates, with the procedure to be followed in the adjustment of transportation charges, and with the regulation of security issues. They will first be given brief consideration, before we set forth the more strictly financial sections of the new legislation.

On the whole, the prohibitions against rate discrimination as traditionally developed are retained. The modifications are slight and formal. Personal, commodity, and local preferences

[26] *Ibid.*, Sec. 402, par. (17). The provisions as to "car service" are declared not to affect or impair the police power of the states "to require just and reasonable freight and passenger service for intrastate business, except in so far as such requirement is inconsistent with any lawful order of the Commission."

[27] *Cf.* Ch. VIII, *supra.*

are condemned in general terms. But the authority of the Commission with respect to the special form of local discrimination involved in the long-and-short-haul clause is expressly, if somewhat ambiguously, restricted. The Commission is denied the right to "permit the establishment of any charge to or from the more distant point that is not reasonably compensatory for the service performed." This is the most important restriction upon the freedom of the Commission. But it is also provided that if a circuitous line or route is authorized by the Commission to meet the competitive charges of a more direct line or route, and to maintain at the same time higher charges at intermediate points, the authority so granted must not extend to intermediate points "as to which the haul of the petitioning line or route is not longer than that of the direct line or route between the competitive points." The Commission is forbidden, also, to authorize a departure from the long-and-short-haul principle "on account of merely potential water competition not actually in existence." There is a further provision, moreover, that whenever a railroad reduces rates because of actual competition with a water route, it may not increase such rates until it shall have been found, after a hearing by the Commission, "that such proposed increase rests upon changed conditions other than the elimination of water competition." The obvious purpose of this declaration is to prevent railroad rate-cutting merely as a means of destroying competition by water. Whether the amendment of the long-and-short-haul clause is likely to introduce significant changes in the adjustment of freight tariffs will depend upon the interpretation of the new clauses by the Commission and the courts.[28]

In the regulation of rates the authority of the Commission is extended to the establishment of minimum as well as maximum charges. This new power is designed to afford an effective public safeguard against rate fluctuations and destructive competitive practices that might naturally emerge in a period

[28] *Ibid.*, Sec. 406, amending Sec. 4 of the Interstate Commerce Act, pars. (1), (2).

of industrial depression and decreased traffic demand. The Commission is also empowered to establish through routes, fix joint rates—as to both maxima and minima—and prescribe the division of such joint rates. In establishing through routes, the Commission is directed not to require any carrier to use substantially less than the entire length of its road without such carrier's consent, "unless such inclusion of lines would make the through route unreasonably long as compared with another practicable through route which could otherwise be established," except that in case of congestion of traffic, shortage of equipment, or other emergency, the Commission may establish temporarily such through routes as are deemed necessary or desirable in the public interest.[29]

The authority of the Commission over joint rates, and the division thereof, is for the most part coextensive with its general rate-making power. It may act upon its own initiative as well as upon complaint, and it may prescribe for the future, after hearing and investigation, the just and reasonable rates and their apportionment that shall be lawfully applicable under the particular circumstances and conditions involved. But in prescribing the divisions of joint rates, the Commission is directed to give due consideration, among other things, to the efficiency of the carriers concerned; the amount of revenue required to pay their respective operating expenses, taxes, and a fair return on the value of their railway property; the importance to the public of the transportation services rendered by such carriers; whether any participating carrier is an originating, intermediate, or delivering line; "and any other fact or circumstance which would ordinarily, without regard to the mileage haul, entitle one carrier to a greater or less proportion than another carrier of the joint rate, fare, or charge." These provisions governing the apportionment of joint rates may be made to exert a strong financial influence upon the adjustment of the difficulties that spring from the co-existence of strong and

[29] *Ibid.*, Sec. 418, amending Sec. 15 of the Interstate Commerce Act, pars. (1), (3), (4).

weak roads, and improve the general credit position of the carriers.[30]

In like manner, the new rules as to rate suspension, by rendering the flow of revenue from transportation more flexible and more readily responsive to the needs of the carriers, are calculated to strengthen, though indirectly and in subsidiary measure, the financial status of the railroads. All new rate schedules filed with the Commission may be suspended, pending investigation and decision as to their reasonableness, for a period not exceeding 120 days beyond the time they would otherwise become effective; and in the event that the hearing cannot be concluded within that time, the Commission may extend the period of suspension for not more than 30 days in addition. If the proceedings have not been completed and an order issued by that time, the new rate schedules then become immediately effective; but in case of an increase in rates for the transportation of property, the Commission may require the carriers to keep accurate account of all amounts received by virtue of the increase, and upon the completion of the hearing and the promulgation of its decision it may order the carriers involved to refund with interest such portion of the increased charges as are disclosed by its findings not to be justified.[31]

The conflict between state and federal authority in rate regulation constituted one of the grave defects of the old system of public control. While this conflict was being progressively dissolved by judicial decision in the direction of federal supremacy, there was need of explicit legislative recognition of the dominance of national jurisdiction. The Transportation Act is, for the most part, declaratory of this legal status. Whenever there is called into question a rate, charge, classification, or practice imposed by state authority or initiated by the Railroad Administration during the period of Federal Control (when national authority was exclusive and plenary even over intra-

[30] *Ibid.*, Sec. 418, par. (6).
[31] *Ibid.*, Sec. 418, par. (7).

state rates), the Commission must notify the state or states interested of the proceeding; may confer with the state authorities concerning the relationship between rate structures and practices over which power is vested in both the nation and the states; may arrange joint hearings with state regulating bodies with respect to such matters as fall within the jurisdiction of the Commission and which may affect the rate-making authority of the states; and may utilize the coöperation, services, records, and facilities of the state authorities in the enforcement of its powers. But whenever the Commission finds in such investigation that any rate, charge, classification, or practice causes any undue preference or advantage as between persons and localities in intrastate and in interstate commerce, or any unjust or unreasonable discrimination against interstate commerce, it may remove the discrimination by prescribing the rate or charge, both maximum and minimum, and the classification or practice, thereafter to be observed, "the law of any State or the decision or order of any State authority to the contrary notwithstanding." This amendment to the Act to Regulate Commerce does not clothe the Commission with authority to initiate intrastate rates *per se,* but it does recognize explicitly the rule of the Shreveport decision, whereby the Commission may, as a means of exercising its acknowledged power to prevent discrimination, regulate such intrastate rates as constitute, whether directly or indirectly and intentionally or incidentally, a restrictive burden upon interstate commerce.[82]

The foregoing adjustments concern primarily the relativity of rates and the procedure of their establishment. Their influence upon credit and finance is indirect and incidental. The most important financial provisions of the Transportation Act, aside from those which define a rule of rate-making and enunciate principles and machinery for the limitation of the rate of return, are those which deal with the regulation of security issues. The

[82] *Ibid.*, Sec. 416, amending Sec. 13 of the Interstate Commerce Act, pars. (3), (4).

need of federal authority over capitalization had been keenly felt for many years, and the Interstate Commerce Commission had repeatedly recommended such regulation in its annual reports. The efforts of the states had proved inadequate, conflicting, and unduly burdensome. Not only was federal power essential for the removal of financial manipulation and abuse, but sound and conservative financial organization was demanded for the effective regulation of rates, and for the adequate maintenance of the transportation service. For reasons such as these the Transportation Act vested exclusive authority over the issuance of railroad securities in the Interstate Commerce Commission.[83]

It is unlawful for any carrier to issue stocks, bonds, or other evidences of indebtedness, or to assume any obligation with respect to securities issued by any other individual or corporation, "unless and until, and then only to the extent that, upon application by the carrier, and after investigation by the Commission of the purposes and uses of the proposed issue and the proceeds thereof, or of the proposed assumption of obligation . . . the Commission by order authorizes such issue or assumption." The jurisdiction of the Commission is exclusive and plenary, and its approval, without further authority, is sufficient to give final validity to the issuance of securities and the assumption of obligations by the carriers. But upon receipt of an application for approval of security issues, the Commission must notify the Governor of each state in which the carrier involved operates; and the railroad, public service, or public utility commissions, or other state authorities, may make such representations as they deem necessary to protect the interests of the people of the states concerned. Moreover, in giving its approval the Commission is directed to act favorably upon the application of a carrier only if the proposed financing is for some lawful object within its corporate purposes and compatible with the public interest, and is reasonably necessary and

[83] *Ibid.*, Sec. 439, amending the Interstate Commerce Act by inserting a new section, to be designated as Sec. 20a.

appropriate for the achievement of this object. The Commission may completely grant or deny the application, or partly grant and partly deny it, or approve it with such modifications and under such terms and conditions as are deemed desirable.[34] The Commission must require from carriers hereafter issuing any securities special or periodical reports showing in such detail as may be prescribed what disposition has been made of these securities and how their proceeds have been applied.[35]

It is expressly declared that the control over the issuance of securities vested in the Interstate Commerce Commission shall not be construed "to imply any guaranty or obligation as to such securities on the part of the United States." But any security or obligation issued or assumed by a carrier for which the authorization of the Commission is required, "shall be void, if issued or assumed without such authorization therefor having been first obtained." If any such void security is acquired by a *bona fide* purchaser, such person may hold the carrier and its directors, officers, attorneys, and other agents who participated in the invalid transaction jointly and severally liable for the full amount of the damage sustained by him; and if the security is acquired directly from the carrier issuing it, the holder has the option of rescinding the transaction, surrendering the security, and recovering the consideration paid for it. Moreover, penalties are imposed upon those responsible for the issue or disposition of securities in violation of the legal requirements

[34] *Ibid.*, Sec. 439, pars. (2), (7), (6), (3). The provisions as to the regulation of security issues are not applicable to notes maturing in not more than two years and aggregating (together with all other then outstanding notes of a maturity of two years or less) not more than 5 per cent. of the par value of the securities of the carriers then outstanding. Where securities have no par value, their fair market value as of date of issue is to be considered their "par value" for this purpose. Carriers issuing notes which are exempt from public approval must file with the Commission a certificate of notification containing substantially the same information as is required to be provided in applications for authority to issue other securities. Whenever such notes are funded they become subject to all the provisions for the regulation of security issues. (Par. [9].)

[35] *Ibid.*, Sec. 439, par. (10). This provision is applicable to the notes described in the preceding foot-note as well as to other securities.

as previously described. Any director, officer, attorney, or other agent of a carrier "who knowingly assents to or concurs in" the issuance of securities or the assumption of obligations, or in their sale or disposition or use of the funds derived from them, in violation of law or of the orders of the Commission, is guilty of a misdemeanor, and upon conviction is punishable by a fine of not less than $1,000 nor more than $10,000, or by imprisonment for not less than one year nor more than three years, or by both such fine and imprisonment.[36]

Finally, we come to the provisions of the Transportation Act that deal directly with financial adjustments. Like the provisions relative to the control of security issues, they are incorporated into the Act to Regulate Commerce by the insertion of a new section. They establish a rule of rate-making, define principles to govern the determination of a fair return, and indicate the disposition to be made of earnings in excess of a fair return.[37]

First, by way of foundation for the regulation of the rate of return and the administration of the excess earnings of the carriers, a rule of rate-making is expressly defined, for the purpose of controlling the flow of railroad operating income.

[36] *Ibid.*, Sec. 439, pars. (8), (11). In order that the provisions for the regulation of security issues, as well as the financial stipulations hereafter to be described, may be the more effectively enforced, it is made unlawful, after December 31, 1921, for any person to be an officer or director of more than one carrier, unless authorized by the Commission upon a showing "that neither public nor private interests will be adversely affected thereby." Moreover, it is further made unlawful for any officer or director of a carrier to receive any financial or other material benefit "in respect of the negotiation, hypothecation, or sale of any securities issued or to be issued by such carrier, or to share in any of the proceeds thereof, or to participate in the making or paying of any dividends of an operating carrier from any funds properly included in capital account." Any violation of these provisions is declared to be a misdemeanor, and is punishable, on conviction, by a fine of not less than $1,000 nor more than $10,000, or by imprisonment for not less than one year nor more than three years, or by both such fine and imprisonment. (Par. 12.)

[37] *Ibid.*, Sec. 422, amending the Interstate Commerce Act by inserting a new section, to be designated as Sec. 15a.

This rule, as incorporated in the act, is a clear expression of public policy; it is free from technical complexities or confusing legislative verbiage. "In the exercise of its power to prescribe just and reasonable rates," the declaration specifies, "the Commission shall initiate, modify, establish or adjust such rates so that carriers as a whole (or as a whole in each of such rate groups or territories as the Commission may from time to time designate) will, under honest, efficient and economical management and reasonable expenditures for maintenance of way, structures and equipment, earn an aggregate annual net railway operating income equal, as nearly as may be, to a fair return upon the aggregate value of the railway property of such carriers held for and used in the service of transportation." This general enunciation of policy does not deprive the Commission of reasonable latitude in modifying or adjusting particular rates that are deemed to be unjust or unreasonable, nor does it prevent the Commission from prescribing different charges for different sections of the country.[88]

In its application of the principle as thus formulated the Commission is directed to determine and announce, from time to time, what percentage of the aggregate property value of the railroads constitutes a fair return—this percentage to be uniform for all rate groups or territories that may be established by the Commission. In reaching its decision as to what constitutes a fair return, the Commission, according to its legislative instructions, is not to confine itself to the mere prevention of confiscatory adjustments. It must give "due consideration, among other things, to the transportation needs of the country and the necessity (under honest, efficient, and economical management of existing transportation facilities) of enlarging such facilities in order to provide the people of the United States with adequate transportation." For the period of two years beginning March 1, 1920, however, Congress assumed the burden, through direct legislative enactment, of determining what con-

[88] *Ibid.*, Sec. 422, par. (2).

stitutes a fair return. The Commission was ordered to "take as such fair return a sum equal to 5½ per centum of such aggregate value, but may, in its discretion, add thereto a sum not exceeding one-half of one per centum of such aggregate value to make provision in whole or in part for improvements, betterments or equipment, which, according to the accounting system prescribed by the Commission, are chargeable to capital account." [39]

The valuation upon which the fair return is to be computed is to be determined from time to time, and as often as may be necessary, by the Commission; but the results of the federal valuation of railroads now in progress may be utilized as far as they are available, and when this valuation has been finally completed with regard to the railway property of any carrier, the value so ascertained must be accepted by the Commission for the purpose of determining the "aggregate value" upon which the fair return is to be based. Due consideration must be given to all the elements of value recognized by law for rate-making purposes, and the property investment account of the carriers is to receive only such consideration as it is legally entitled to in the establishment of such values for rate-making purposes.[40]

Express recognition is then given to the probable emergence of earnings in excess of a fair return, because of the coexistence of strong and weak roads, and principles are formulated and machinery established for the disposition of these excess earnings. The basic assumption of these novel provisions is that the public is equitably entitled to railway operating income in excess of a fair return on the value of railway property. This assumption, and the circumstances inherent in railway rate-making which give rise to surplus returns, are specifically enunciated. The fundamental paragraph of the excess earnings provisions reads: "Inasmuch as it is impossible (without regu-

[39] *Ibid.*, Sec. 422, par. (3).
[40] *Ibid.*, Sec. 422, par. (4).

lation and control in the interest of the commerce of the United States considered as a whole) to establish uniform rates upon competitive traffic which will adequately sustain all the carriers which are engaged in such traffic and which are indispensable to the communities to which they render the service of transportation, without enabling some of such carriers to receive a net railway operating income substantially and unreasonably in excess of a fair return upon the value of their railway property held for and used in their service of transportation, it is hereby declared that any carrier which receives such an income so in excess of a fair return, shall hold such part of the excess, as hereinafter prescribed, as trustee for, and shall pay it to, the United States." [41]

One-half of all net operating income in excess of 6 per cent. must be placed in a reserve fund established and maintained by the individual carriers, and the remaining one-half must be paid to the Interstate Commerce Commission, within four months following the period for which such excess earnings are found to have been realized, for the purpose of establishing and maintaining a general railroad contingent fund.[42]

The reserve fund of each carrier can be used, to the extent that its net operating income for any year is less than 6 per cent., for the purpose of paying interest or dividends on its bonds, stocks, or other securities, or rentals for leased roads, but for no other purpose. The carriers' reserve funds need not be accumulated beyond a sum equal, in each case, to 5 per cent. of the value of their property, and when so accumulated the carriers' portions of their excess income may be used by them for any lawful purpose. Furthermore, any carrier, or corporation organized to become a carrier, which proposes to undertake the construction and operation of a new line, may, by petitioning the Commission, be permitted to retain for a period not exceeding ten years all its earnings derived from such new construction, to be used by it for any lawful pur-

[41] *Ibid.*, Sec. 422, par. (5).
[42] *Ibid.*, Sec. 422, par. (6).

pose, provided the work of construction is completed within a period to be designated by the Commission.[43]

The general railroad contingent fund is to be administered as a revolving fund by the Commission, and is to be used by it "in furtherance of the public interest in railway transportation either by making loans to carriers to meet expenditures for capital account or to refund maturing securities originally issued for capital account, or by purchasing transportation equipment and facilities and leasing the same to carriers." The procedure to be followed by the carriers in making application for loans, the nature of the investigation, and the terms and conditions of the Commission's grant are similar in character to those prescribed in making loans to the railroads during the period of transition to private management as previously explained. In order that the general railroad contingent fund may be used for the acquisition and leasing of railway equipment and facilities, the Commission is clothed with broad powers whereby it may purchase, sell, and contract for the construction, repair, and replacement of such equipment and facilities, and may determine the rules and regulations, and terms and conditions, under which the leases will be granted. It is expressly provided, however, that the rental charges agreed upon between the Commission and each carrier involved shall be at least sufficient to pay a return of 6 per cent. annually on the value of the equipment or facilities leased, in addition to a proper allowance for depreciation. All rental charges or other payments, including amounts resulting from actual sale, received by the Commission in connection with equipment and facilities, as well as the loans to carriers, and the interest thereon, that may be received from time to time, must be placed in the general railroad contingent fund.[44]

[43] *Ibid.*, Sec. 422, pars. (7), (8), (18).

[44] *Ibid.*, Sec. 422, pars. (10), (11), (12), (13), (14), (15), (16). There is a specific declaration that the provisions governing rate-making, the rate of return, and excess earnings as described above are not to be construed as depriving shippers of their right to reparation because of excessive or discriminatory charges, but that "no shipper shall be entitled

§5. *Railroad Labor and Continuity of Operation*[45]

The labor provisions of the Transportation Act are entirely new to the federal scheme of regulation. They are the outcome of the frequent recurrence of labor difficulties during recent years, and of the experience of the Railroad Administration in adjusting labor relationships during the Federal Control period. They aim primarily to establish machinery for the settlement of disputes between the carriers and their employees and subordinate officials.[46] The jurisdiction of the agencies contemplated by the labor provisions, and of the public authorities established by them, extends to all matters involving grievances, rules, working conditions, and wages; but it is largely appellate in character, and no authority is vested in these bodies for the enforcement of their orders or decisions. Primary reliance is placed upon conference and accommodation between the parties directly involved; then the voluntary and governmental agencies may be resorted to; but final success in preventing disruption of the transportation service is dependent upon the strength with which the forces of public opinion operate. Nothing in the new legislation provides for compulsory submission of disputes to public authority or for compulsory enforcement of such settlements as may be directed by public authority.

That it is the intent of the labor sections to emphasize the desirability of private settlement of labor disputes is attested by the character of the legislative declaration which precedes the provision for machinery of adjustment. It is made the duty "of all carriers and their officers, employees, and agents to exert every reasonable effort and adopt every available means to avoid any interruption to the operation of any carrier growing out of any dispute between the carrier and the employees or subor-

to recover upon the sole ground that any particular rate may reflect a proportion of excess income to be paid by the carrier to the Commission in the public interest." (Par. [17]).

[45] *Cf.* Ch. IX, *supra.*

[46] Transportation Act, 1920, Title III, Disputes Between Carriers and Their Employees and Subordinate Officials, Secs. 300-316.

dinate officials thereof. All such disputes shall be considered and, if possible, decided in conference between representatives designated and authorized so to confer by the carriers, or the employees or subordinate officials thereof, directly interested in the dispute." Upon failure to reach a decision through conference, the dispute must be referred to such board as is authorized by subsequent provisions to hear and decide controversies of the character involved.[47]

Provision is then made for the establishment of Railroad Boards of Labor Adjustment by agreement between the carriers (individually, or in groups, or as a whole) and their employees (or organizations, or groups of organizations, of employees). The formation of these Adjustment Boards is entirely optional with the railroads and their labor forces. Each Adjustment Board thus organized, however, must examine and decide any dispute involving only grievances, rules, or working conditions which has not been adjusted by conference between the parties immediately involved, upon application of the chief executive of any carrier or organization of employees, upon the written petition of not less than 100 unorganized employees, upon the Adjustment Board's own motion, or upon the request of the Railroad Labor Board. It is to be noted that the jurisdiction of the Adjustment Boards does not extend to disputes as to wages, and that no authority is vested in these boards to enforce their decisions even as to grievances, rules, and working conditions.[48]

The regulation of wages, and the major responsibility for preventing interruption of the transportation service, are centered in the Railroad Labor Board created by the new act. This board is composed of nine members appointed by the President, by and with the advice and consent of the Senate. Three of its members constitute the labor group, and are selected from not less than six nominees provided by the employees; three of them constitute the management group, and are selected

[47] Secs. 302, 303.
[48] *Ibid.*, Secs. 302, 303.

from not less than six nominees provided by the carriers; the remaining three constitute the public group, and are chosen directly by the President. If the carriers or employees fail to make nominations as lawfully required, the President is authorized to make the necessary appointments directly, selecting, as far as practicable, individuals associated in interest with the group to be represented. Members of the Labor Board who, during their term of office, are members of, or hold office in, or are employed by, any labor organization or carrier, or have any pecuniary interest in any railroad corporation, are ineligible to further membership in the board. The members of the board are to hold office for a term of five years (except that, of the original members, one from each group is to be appointed for three years, one for two years, and one for one year), and the annual salary is fixed at $10,000. The central offices must be maintained in Chicago, but the board may meet elsewhere in its discretion. It is given authority to issue subpœnas requiring the attendance of witnesses and the production of books and papers, and it is empowered, through its members, employees, or agents, to have access to, examine, and copy such books, accounts, records or correspondence as relate to any matter which it has authority to investigate.[49]

The jurisdiction of the Railroad Labor Board in the settlement of disputes extends to three distinct groups of cases. In the first place, it is directed to hear and decide such disputes concerning grievances, rules, and working conditions as are certified to it by any Adjustment Board because that body is unable to settle them. Secondly, where no appropriate Adjustment Board has been organized, disputes as to grievances, rules, or working conditions which, because of failure to reach agreement through conference, would otherwise come before an Adjustment Board, must be received for hearing and decision by the Labor Board, at the request of the carriers or employees (in the same manner as it would normally reach an Adjustment

[49] *Ibid.*, Secs. 304, 305, 306, 308(2), 310, 311.

Board), or upon the Labor Board's own motion if it believes that the dispute is likely to interrupt commerce substantially. Finally, the Labor Board is clothed with authority to adjust disputes involving railway wages. Upon the application of the chief executive of a carrier or of an organization of employees, or upon written petition of not less than 100 unorganized employees, or upon its own motion when traffic interruption is threatened, the Labor Board must hear and decide all disputes with respect to wages and salaries of employees and subordinate officials which have failed to be adjusted through private conference. And even in those cases where agreement as to wages has been reached through private conference, the Labor Board may, on its own motion, within ten days after such agreement, suspend the operation of the agreement or decision, if it "is of the opinion that the decision involves such an increase in wages or salaries as will be likely to necessitate a substantial readjustment of the rates of any carrier." The agreement or decision so suspended must then receive a hearing and the board must affirm or modify it as soon as practicable. Decisions of the Labor Board in all these matters must have the concurrence of not less than five of its nine members, and in case of a decision involving wages and salaries, at least one of the representatives of the public must concur.[50]

The general character of the legislative policy toward labor is reflected in the provision that all the decisions of the Labor Board with regard to wages or salaries and of the Labor Board or Adjustment Boards with regard to working conditions "shall establish rates of wages and salaries and standards of working conditions which in the opinion of the board are just and reasonable." And the Labor Board is instructed, in determining the justness and reasonableness of wages, salaries, and working conditions, to take into account, among other considerations: the scales of wages paid for similar kinds of work in other industries; the relation between wages and the cost of

[50] *Ibid.*, Sec. 307 (a), (b), (c).

living; the hazards of the employment; the training and skill required; the degree of responsibility; the character and regularity of the employment; and inequalities of increases in wages or of treatment as a result of previous wage orders or adjustments. These standards are very comprehensive and are clearly designed to produce equitable adjustments of wages and working conditions. In practice, however, much will necessarily depend upon the relative weight accorded to each of the factors enumerated.[51]

The effectiveness of the labor provisions will depend, very largely, on whether public opinion will prove strong enough to compel strict observance of the orders of the Railroad Labor Board, despite the absence of penal sanctions. The law merely provides that its decisions shall be entered upon the records "and copies thereof, together with such statement of facts bearing thereon as the board may deem proper, shall be immediately communicated to the parties to the dispute, the President, each Adjustment Board, and the Commission, and shall be given further publicity in such manner as the Labor Board may determine." When the Labor Board has reason to believe that any decision rendered by itself or by an Adjustment Board has been violated by any carrier or organization of employees, it may on its own initiative investigate and determine whether there has been any such violation. Even in that case, however, the Labor Board is merely empowered to make its decision public in such manner as it may determine. In other words, the force of public opinion is relied upon as the ultimate agency through which the labor relationships prescribed by governmental authority must be enforced.[52]

[51] *Ibid.*, Sec. 307, par. (d).

[52] *Ibid.*, Sec. 307, par. (c); Sec. 313. There are also many miscellaneous provisions in the Transportation Act, defining, for the most part, the private rights, in various connections, of carriers and shippers, and possessing but a remote bearing upon the important public questions involved in the railroad problem. It should be added, however, that the Interstate Commerce Commission is enlarged so as to consist of eleven members, and the annual salary of the commissioners is raised to $12,000.

CHAPTER XII

THE CHARACTER OF THE ADJUSTMENT

Our final task is to present an appraisal of the railroad situation following the return of the roads to private management under the regulatory system established by the Transportation Act. This will necessitate an examination of the shortcomings of the settlement, of the constructive features of the adjustment, and of the elements of the railroad outlook. This undertaking need not be based altogether upon *a priori* considerations. The first year of the Esch-Cummins Act was a very eventful one; and while it cannot provide an adequate test of the new legislation, a brief sketch of immediate developments will lend assistance in formulating a sound interpretation.

§1. *The First Year of the New Legislation*

Direct governmental responsibility toward the railroads was not completely terminated with the relinquishment of Federal Control. A twofold financial obligation remained: first, the guaranty of the standard return was continued for a period of six months; and second, provision was made for new loans for the capital account.

Most of the carriers availed themselves of the protection of the six-months' extension of the standard return. Only 35 operating corporations elected to resume private management on their own responsibility; 666 of them chose the safer alternative of the government guaranty. The necessity of the guaranty, and the wisdom of the roads in accepting it, were demonstrated by the results. Although the volume of traffic

remained favorable throughout the six-months' period, the continuation of the level of transportation charges operative under Federal Control, coupled with increased wages and mounting costs, resulted in a net operating deficit of about $200,000,000, which, together with the guaranteed standard return, imposed upon the Government a total obligation in excess of $600,000,000. Without this transitional safeguard, a large proportion of the roads would have faced receivership. It is to be noted, however, that considerable difficulty was encountered in making the protection of the guaranty practically available for the railroads. Many carriers found a pressing current need for funds, and made application to the Government for advances. But after the Treasury Department, upon the recommendation of the Interstate Commerce Commission, had advanced some $254,000,000, further "piece-meal" payments were refused, pending a final determination of the extent of the Government's indebtedness in each case. From the standpoint of the railroads, the situation was critical, since months of laborious computation (aside from the contingency of prolonged litigation) might thereby be allowed to elapse, while the corporations were in urgent need of immediate resources for interest payments and even for operating expenses. The necessity for relief was widely recognized, but not until about a year after the passage of the Transportation Act—through the enactment of the Winslow amendment February 26, 1921—were the carriers accorded the full degree of protection originally intended.

The second important phase of transitional policy was the extension to the carriers for a period of two years of the privilege of utilizing the credit of the Government in raising funds for the capital account. For this purpose the sum of $300,000,000 had been appropriated as a "revolving fund," and its administration entrusted to the Interstate Commerce Commission. In view of the fact that the interest rate on these governmental loans was limited to 6 per cent., while market rates on excellent security ran as high as 8 to 9 per cent., requests for

aid far exceeded the capital available. On June 7, 1920, the Commission made the following tentative apportionment of the fund: for the acquisition of freight cars, $75,000,000; for the acquisition of freight and switching locomotives, $50,000,000; for additions and betterments to promote the movement of freight-train cars, $73,000,000; for maturing indebtedness, $50,000,000; for short-line railroads, $12,000,000; and as a temporary reserve for claims and judgments against the United States arising out of Federal Control, $40,000,000.[1] With the aid of committees of the Association of Railway Executives and the American Short Line Railroad Association, changes in the apportionment for these various purposes were subsequently made, and the applications of individual carriers certified by the Commission. The process of extending loans was somewhat retarded by the requirement of an unqualified finding that the sums certified for the various roads were not obtainable elsewhere. After a hearing held on September 23, 1920, the Commission accepted the consensus of opinion "that inability of an applicant for a loan to provide itself with the funds necessary from other sources should not be interpreted as absolute inability, but that if the terms and conditions under which funds could be obtained from other sources are so burdensome that they should not, in the exercise of a wise business discretion, be accepted, the finding could properly be made that the applicant is unable to obtain the funds necessary for the purposes of the loan from other sources."[2]

Probably the most important development during the first year of the new legislation that possesses permanent significance was the increase in transportation charges which became effective August 26, 1920. Almost immediately after the restoration of private management the Commission requested the carriers

[1] For further data with regard to "loans to carriers during transition period," see Thirty-fourth Annual Report of the Interstate Commerce Commission, 1920, pp. 30-33.

[2] *Ibid.*, p. 33.

to prepare petitions for the rate advances which they deemed necessary. Applications were filed toward the end of April and early in May. They called for substantial horizontal advances on a percentage basis. The Commission held hearings on these proposals for a period of five weeks, beginning late in May and ending early in July. The final decision of the Commission was a very complex one, not alone because the entire country was to be affected, but because this was to constitute the first rate determination under the new provisions of the Transportation Act. There were many difficulties, and little guidance through precedent.

First, it was necessary to determine whether rates should be adjusted for the country as a whole, or for specific rate groups or territories. As early as March 22, 1920, this question had been argued before the Commission, and the preponderance of opinion favored the utilization of the three classification territories—official, southern, and western—as rate groups. The carriers therefore prepared their petitions and supporting evidence on this basis. The Commission finally adopted four groups: Eastern, Southern, Western, and Mountain-Pacific—the western classification territory being divided into the Western group and the Mountain-Pacific group, "the territory west of the Colorado common points" constituting the new group.[8]

The next problem was to ascertain the valuation, for rate-making purposes, to be assigned to the property of the roads in each of these groups. The Commission gave due considera-

[8] "The record shows that the principal railroads serving the territory west of the Colorado common points, especially the so-called transcontinental railroads as a whole, are in a substantially better financial condition than other carriers in the western territory. It also shows that the rates, generally speaking, are materially higher in the region west of the Colorado common points than in the part of the western territory lying east thereof. Considering the whole situation it is our view that the territory west of the Colorado common points and the traffic to and from that territory may properly be given separate treatment." *Ex Parte* 74 (In the matter of the applications of carriers in official, southern, and western classification territories for authority to increase rates), pp. 224-225.

tion to all the elements presented by the record: to the claim of the carriers that the "aggregate amount carried as book cost of plant and equipment" be taken as the value base; to the results of its own valuation of railroad properties as far as available; to the investment accounts of the roads as maintained since 1907 under its supervision; to the "probable earning capacity of the properties under particular rates prescribed by law and the sums required to meet operating expenses, separately and collectively;" to the amount and market value of railroad stocks and bonds; to "the fact that the carriers are operating units and going concerns" viewed "in the light of the financial history of the transportation system of the United States;" to the "needs for working capital, and materials and supplies on hand." On the basis of this record, but without explaining the methods by which it reached its results, the Commission concluded that the total value of the railroad properties "for the purposes of this particular case" was $18,900,000,000. The book cost of the roads, as of December 31, 1919, presented by the carriers totaled $20,040,572,611. The Commission's valuation by groups was about 2½ per cent. lower than that of the eastern carriers, and more than 8 per cent. lower than that of the southern and western roads.[4]

Under the Transportation Act the carriers were entitled to a return of 5½ per cent. on the value of the property in each rate group, and to an additional ½ of 1 per cent., within the discretion of the Commission. In view of the shortage of equipment and the difficulties of financing, the Commission readily granted the maximum rate of return allowable under the law. The remaining task, therefore, was to determine the specific increases in charges necessary to yield a 6 per cent. return on a total valuation of $18,900,000,000, or a net operating income of $1,134,000,000 annually. In order to perform this task effectively, it was necessary to consider the stability of the existing price level, to take into account the wage in-

[4] For a tabulation by groups of both the book cost of the properties and of the valuation of the Commission, see *Ex Parte* 74, pp. 228-229.

crease of more than $600,000,000 authorized in July by the Railroad Labor Board, and to estimate the probable extent of traffic in the uncertain period following the award. The carriers in eastern territory asked for an increase in freight rates of 40 per cent., those in southern territory for 39 per cent., and those in western territory for 32 per cent. The Commission granted the full 40 per cent. for the roads in the eastern district, reduced the claim of the southern district to 25 per cent., and allowed a 35 per cent. increase for the roads in the eastern portion of western classification territory (to the western district as defined by the Commission), and 25 per cent. for the Mountain-Pacific group. The increase on inter-group rates was fixed at 33⅓ per cent. In addition, a flat advance of 20 per cent. was allowed on passenger fares, excess baggage rates, and tariffs for milk shipped in passenger trains; and a 50 per cent. surcharge was authorized upon "the space" of passengers in sleeping and parlor cars, the revenue to accrue to the carriers. This revision of railway rates, ordered July 29, was put into effect August 26, but a few days before the lapse of the six months' guaranty period. It was estimated that the new tariffs would produce an increase in gross annual revenues of about $1,500,000,000.

The Interstate Commerce Commission assumed that the state commissions would permit similar rate advances on intrastate hauls; but in only about one-half of the states were the increases asked by the carriers in accordance with the Commission's order approved in full. In a few of the states increases were altogether denied; in some of them the advances applied for were reduced; in others the state commissions pleaded lack of jurisdiction. The state decisions were contested before the Interstate Commerce Commission, which uniformly declared them to be in violation of the provisions of the Transportation Act, and ordered the carriers to increase their rates in the various states in conformity with the interstate advances. Not until the early months of 1921, however, were the railroads finally enabled to secure the desired advances

over the entire country. The question of the validity of the Commission's exercise of authority over intrastate rates is now before the federal courts. The chief point of attack is centered in the claim that the state rates were increased by the Commission as a means of providing additional revenue for the carriers, rather than to prevent discrimination against interstate commerce. The trend of opinion seems to indicate that the Interstate Commerce Commission will be sustained—that the principle of the Shreveport decision will be extended, if necessary—and that federal authority over rate regulation will thereby become practically exclusive.

Next to the rate advances, the wage increases ordered by the Railroad Labor Board exerted the most significant influence upon the financial condition of the carriers during the first year following the restoration of private management. The wage demands which were submitted to the railroads in March, 1920, had been pending for more than a year. During the last month of Federal Control strikes were averted, especially among the maintenance workers and trainmen, only by the promise of the President that he would hasten the organization of the labor machinery to be provided in the new legislation, in order that the demands of the men might be given early consideration. The Labor Board was not immediately organized, however, and when the carriers and their employees failed to come to agreement, a series of "unauthorized" strikes ensued, beginning in April and continuing into the summer. The strikers were chiefly switchmen and yardmen; only the larger terminals were affected; and the union officials refused to support the men. Since the switchmen hold key positions, however, their defection so tied up the traffic in terminal yards that the congestion of freight spread to the entire country, and a complete breakdown of the service was threatened.[5] These strikes hastened the

[5] ". . . on account of the switchmen's strikes the railroads 'ceased to function' to a far greater extent than during the period toward the end of 1917 when a similar statement was made of them as a

organization of the Railroad Labor Board on April 14, 1920, and hearings on the wage demands were begun immediately. These hearings were concluded June 2, and the increases were ordered July 20, retroactive to May 1, 1920.[6]

The aggregate demands of the employees have been officially estimated at about $800,000,000; the annual wage increases authorized by the Labor Board (as estimated by the Interstate Commerce Commission in connection with the rate advances) was about $618,000,000. Practically all classes of workers on the larger transportation systems were affected; the adjustment of wages on the short line railways (as well as the question of working agreements) were postponed for future decision. In reaching its decision, the Labor Board gave specific consideration to the various "relevant circumstances" prescribed by the Transportation Act, and adjusted all increases on the basis of the schedules then in force, as established by the Railroad Administration under Federal Control. By way of general conclusion it declared: "It has been found by this Board generally that the scale of wages paid railroad employees is substantially below that paid for similar work in outside industry, that the increase in living cost since the effective date of General Order No. 27 and its supplements has thrown wages below the pre-war standard of living of these employees, and that justice as well as the maintenance of an essential industry in an efficient condition require a substantial increase to practically all classes."[7]

reason for their taking over by the Government . . ." *Railway Age*, January 7, 1921, p. 60. "In effect it was as if about 750,000 cars for the time being had ceased to exist as facilities of commerce." Thirty-fourth Annual Report of the Interstate Commerce Commission, 1920, p. 12.

[6] Eighteen months will have elapsed when this decision is rendered from the original presentation in January, 1919, of the first of the requests which it in part determines . . . as a measure of justice it was decided . . . that this decision . . . would be effective as of May 1st, 1920. . . ." United States Railroad Labor Board, Decision No. 2 (Dockets 1, 2, and 3), p. 5.

[7] *Ibid.*, p. 7.

The full financial significance of both the rate advance and the wage increases can be grasped only in the light of the important traffic developments of the year.

The brisk business recovery of the summer of 1919 (after the initial depression following the armistice), coupled with the dislocation of service incident to the coal strike of November, resulted, upon the return of the roads in March, 1920, in a large number of cars "off the owning lines," and in a high percentage of bad order equipment. The carriers, therefore, found themselves especially unprepared to cope with the difficulties of the switchmen's strikes in April. As we have noted earlier, there was a general tie-up of freight cars in the larger terminals, and a complete disruption of the service was threatened. In spite of the efforts of the roads to meet the situation, through the imposition of embargoes and the intensive use of equipment, foodstuffs, coal, and raw materials were being seriously delayed. By May 15, the situation was so grave that the carriers petitioned the Commission to make use of its emergency powers by "(a) the giving of priority and preference in movement of necessary food, fuel, and other vital commodities; (b) the relocation of empty equipment; (c) the necessary postponement and delay of loading or movement of other less important commodities; and (d) the reduction of existing passenger service as far as might be necessary; in order (e) that to the extent necessary to accomplish these purposes the carriers might be relieved from the operation of Federal and state laws and orders recognized under ordinary transportation conditions." [8]

The Interstate Commerce Commission decided that it would be unwise to issue any comprehensive priority or preference orders, but it did at once determine that an emergency existed, and on May 20 began to take the traffic situation in hand through the issue of a series of "car service orders." These

[8] Thirty-fourth Annual Report of the Interstate Commerce Commission, 1920, p. 14.

orders dealt chiefly with the relocation of empty cars, the provision of adequate equipment for the transport of coal, and the free routing of freight. Eastern carriers were directed to deliver empty box cars to their western connections to aid in the movement of food products, while open top equipment was reserved exclusively for coal and was hurried to the east. The Commission coöperated with the Car Service Division of the American Railroad Association and was assisted by terminal committees, similar to those created during Federal Control, at the important industrial centers. Through these means freight congestion was progressively reduced, and the roads were enabled to handle the heaviest traffic in their history for the months of July, August, and September. "On February 27," reported the Commission, "the accumulations of freight were 103,237 cars. For April the daily average accumulations of freight were 208,698 cars, and immediately following the outbreak of the strike mounted to more than 287,000 cars. The daily average in July had been reduced to 101,612 cars, and by October 22 the accumulations were reduced to 39,807 cars, which approximates normal condition."[9] The emergency is believed by many to have been as grave as that in the winter of 1917, and the tonnage of the summer months was unprecedented. The Commission should be credited with noteworthy success in the exercise of the vast "car service" powers granted to it by the Transportation Act.

But the traffic situation was radically changed in the course of the fall months. In November and December the effects of business depression began to be acutely felt, and railroad traffic began to fall off sharply. A car shortage of 147,000 on September 1, had been turned into a surplus of 128,000 by December 23; and at the end of March, 1921, there were 496,000 idle cars in the United States—about one-fifth of the total equipment. In the five-month period from August, 1920, to January, 1921, there was a decrease of 26 per cent. in ton mileage. Between October, 1920, and February, 1921, there was

[9] *Ibid.*, p. 16.

a decrease of 45 per cent. in car loading. When complete traffic statistics become available, the decline in traffic during the depression of 1920 and 1921 will probably be found to be the sharpest with which the roads have ever had to contend.

This traffic situation, coupled with the fact that the wage increases were retroactive to May 1, and that the advance in rates did not become effective till the end of August and was not fully operative on intrastate business for five or six months thereafter, rendered the financial showing of the carriers for the year 1920 the worst in railroad history. The total net operating income for the year was but $62,264,421—about ⅓ of 1 per cent. on the "fair value" recognized by the Commission for the purpose of the rate advances—in spite of the fact that gross revenue had reached the extraordinary figure of $6,225,402,762—the largest sum ever paid for transportation service in a single year. The roads were saved from bankruptcy through the government subsidies during the first eight months, and because of their positive, though inadequate, financial showing from September to the end of the year. For January and February they had received about $150,000,000 under their Federal Control contracts; for the period from March to September they received more than $600,000,000 under the terms of the transitional guaranty; and during the remaining four months their net earnings were somewhat in excess of $225,000,000. While the earnings of the roads for the first four months of independent operation (from September 1, 1920, to January 1, 1921) fell short by more than one-third of the amount necessary to provide the 6 per cent. return contemplated by the Commission in the rate advances, the financial situation actually became critical during the first two months of 1921. Preliminary estimates indicate that the railroads incurred a net operating deficit of more than $8,000,000 during January and February, 1921, more than $7,000,000 of which resulted from the operations of the latter month.

These financial difficulties created a serious dilemma. Fur-

ther rate advances were out of the question—it was widely claimed that the existing charges were "exorbitant," and largely responsible for the decline in traffic—but rate reductions, as a means of stimulating the volume of business, were deemed impossible without a prior readjustment of operating expenses. Since the compensation of employees constitutes the predominant expense item, the carriers turned their attention to the labor situation, pleading, in the first instance, for the abrogation of the national agreements, which they claimed to be one of the primary causes of excessive labor costs.

The question as to the continuance of the national agreements with regard to working conditions that had been "negotiated between the United States Railroad Administration and the so-called standard recognized labor organizations" first came before the Labor Board April 16, 1920, as part of the dispute involving the demands of the men for wage increases. In its decision of July 20, 1920, the Board ordered the continuance of these agreements, unless modified through mutual assent of any carrier and its employees, until further hearings might be held and adequate consideration given to the merits of the controversy. (Decision No. 2.) These "further hearings" were begun January 10, 1921, and the decision of the Labor Board was rendered April 14. Although the Board found that the conferences between the carriers and their employees had been but "a perfunctory performance" of the requirements of the Transportation Act, it took jurisdiction of the dispute because it was one "likely substantially to interrupt commerce." Moreover, the Board refused to vacate its functions by abrogating the agreements at once, without hearing, in spite of the vigorous insistence of the spokesmen of the carriers that without such relief the roads faced financial disaster. Its decision was based on a vast mass of evidence and argument.[10]

Aside from the claim of the railroads that the prevailing adjustment of working conditions was imposing an impossible

[10] United States Railroad Labor Board, Decision No. 119 (Dockets 1, 2, and 3), April 14, 1921.

financial burden upon them, and the counterclaim of the labor organizations that the financial difficulties of the roads were due to mismanagement, argument centered upon the relative merits of national and collective, as against local and individual, determination of working rules. The labor organizations insisted that the national agreements constitute just and reasonable rules and should be applicable to all the carriers; that "local conferences requiring necessarily the participation of thousands of railway employees for several weeks would constitute an economic waste and would produce a multiplicity of controversies as well as irritation and disturbance"; that "to require local conferences would be to expose the local organizations on the several carriers to the entire power and weight of all the carriers acting through the Association of Railway Executives on the conferring carrier"; that "such a disparity of force would produce an inequitable result highly provocative of discontent and likely to result in traffic interruptions." The carriers, on the other hand, contended that the national agreements should be immediately terminated and the matter "remanded to the individual carriers and their employees for negotiation and individual agreement"; that "rules negotiated by the employees and officers who must live under them are most satisfactory"; that "substantial differences exist as between the several carriers with relation to the demands of the service" which should be reflected in the rules; that "these local differences can be given proper consideration only by local conferences." [11]

The Labor Board recognized some merit in both sets of contentions. It refused to extend the national agreements indefinitely, being unable to find that all the rules embodied in them are just and reasonable and equally applicable to all carriers; but it also refused to terminate these agreements at once, being unwilling to "leave many carriers and their employees without any rules regulating working conditions." It admitted that certain matters in the national agreements "are local in nature

[11] *Ibid.*, p. 4.

and require consideration of local conditions," but contended that other matters "are general in character and substantial uniformity in rules regulating such subject matters is desirable." The action of the Labor Board was designed to combine the advantages of both methods of settlement—"to secure the performance of the obligation to confer on this dispute, imposed by law on officers and employees of carriers, to bring about the recognition in rules of differences between carriers where substantial, to preserve a degree of uniformity in rules regulating subject matters of a general nature, to prevent to some extent the operation in negotiations of a possible disparity of power as between the carriers and their employees, and to enable the representatives of employees of each carrier and the officers of that carrier to participate in the formulation of rules under which they must live. . . ." In view of the importance of the controversy, and of the significance of the Board's action as a reflection of the practical functioning of the labor machinery established by the new legislation, the brief decision of the Labor Board may be set forth in full.[12]

"1. The direction of the Labor Board in Decision No. 2, extending the rules, working conditions and agreements in force under the authority of the United States Railroad Administration, will cease and terminate July 1, 1921.

"2. The Labor Board calls upon the officers and system organizations of employees of each carrier, parties hereto, to designate and authorize representatives to confer and to decide so much of this dispute relating to rules and working conditions as it may be possible for them to decide. Such conferences shall begin at the earliest possible date. Such conferences will keep the Labor Board informed of final agreements and disagreements to the end that this Board may know prior to July 1, 1921, what portion of the dispute has been decided. The Labor Board reserves the right to terminate its direction of Decision No. 2 at an earlier date than July 1st, with regard to any class of employees of any carrier if it shall have reason

[12] *Ibid.*, pp. 5-6.

to believe that such class of employees is unduly delaying the progress of the negotiations. The Board also reserves the right to stay the termination of the said direction to a date beyond July 1, 1921, if it shall have reason to believe that any carrier is unduly delaying the progress of the negotiations. Rules agreed to by such conferences should be consistent with the principles set forth in Exhibit "B," hereto attached.[18]

[18] *Exhibit "B" (Ibid., pp. 10-12):*

1. An obligation rests upon management, upon each organization of employees, and upon each employee to render honest, efficient and economical service to the carrier serving the public.
2. The spirit of coöperation between management and employees being essential to efficient operation, both parties will so conduct themselves as to promote this spirit.
3. Management having the responsibility for safe, efficient and economical operation, the rules will not be subversive of necessary discipline.
4. The right of railway employees to organize for lawful objects shall not be denied, interfered with or obstructed.
5. The right of such lawful organization to act toward lawful objects through representatives of its own choice, whether employees of a particular carrier or otherwise, shall be agreed to by management.
6. No discrimination shall be practised by management as between members and non-members of organizations or as between members of different organizations, nor shall members of organizations discriminate against non-members or use other methods than lawful persuasion to secure their membership. Espionage by carriers on the legitimate activities of labor organizations or by labor organizations on the legitimate activities of carriers should not be practised.
7. The right of employees to be consulted prior to a decision of management adversely affecting their wages or working conditions shall be agreed to by management. This right to participation shall be deemed adequately complied with, if and when the representatives of a majority of the employees of each of the several classes directly affected shall have conferred with the management.
8. No employee should be disciplined without a fair hearing by a designated officer of the carrier. Suspension in proper cases pending a hearing, which shall be prompt, shall not be deemed a violation of this principle. At a reasonable time prior to the hearing he is entitled to be apprised of the precise charge against him. He shall have reasonable opportunity to secure the presence of necessary witnesses and shall have the right to be there represented by a counsel of his choosing. If the judgment shall be in his favor, he shall be compensated for the wage loss, if any, suffered by him.
9. Proper classification of employees and a reasonable definition of the work to be done by each class for which just and reasonable wages are to be paid is necessary, but shall not unduly impose uneconomical conditions upon the carriers.

"3. The Labor Board will promulgate such rules as it determines just and reasonable as soon after July 1, 1921, as is reasonably possible and will make them effective as of July 1, 1921, and applicable to those classes of employees of carriers parties hereto for whom rules have not been arrived at by agreement.

"4. The hearings in this dispute will necessarily proceed in order that the Labor Board may be in position to decide with reasonable promptness rules which it may be necessary to promulgate under Section 3 above.

"5. Agreements entered into since March 1, 1920, by any carrier and representatives of its employees shall not be affected by this decision."

§2. *The Shortcomings of the Settlement*

The first year following the termination of Federal Control

10. Regularity of hours or days during which the employee is to serve or hold himself in readiness to serve is desirable.

11. The principle of seniority long applied to the railroad service is sound and should be adhered to. It should be so applied as not to cause undue impairment of the service.

12. The Board approves the principle of the eight-hour day, but believes it should be limitted to work requiring practically continuous application during eight hours. For eight hours' pay eight hours' work should be performed by all railroad employees except engine and train service employees, regulated by the Adamson Act, who are paid generally on a mileage basis as well as on an hourly basis.

13. The health and safety of employees should be reasonably protected.

14. The carriers and the several crafts and classes of railroad employees have a substantial interest in the competency of apprentices or persons under training. Opportunity to learn any craft or occupation shall not be unduly restricted.

15. The majority of any craft or class of employees shall have the right to determine what organization shall represent members of such craft or class. Such organization shall have the right to make an agreement which shall apply to all employees in such craft or class. No such agreement shall infringe, however, upon the right of employees not members of the organization representing the majority to present grievances either in person or by representatives of their own choice.

16. Employees called or required to report for work, and reporting but not used, should be paid reasonable compensation therefor.

was one of the most extraordinary in railroad history; but there is little ground for attributing the vicissitudes of the carriers to the new legislation, or for concluding that the Transportation Act is a failure. A single year's experience, under any circumstances, could scarcely provide an adequate test of so far-reaching an enactment. The conditions of 1920 and the early months of 1921 were especially unsuited to disclose the real possibilities of the Esch-Cummins Act.

The financial difficulties of the railroads, as we have already noted, were due to many causes: for the first six months of private management an inadequate rate level was in operation; in addition, large wage increases became effective four months before the rate advances were made; the transportation service was seriously interrupted by strikes; traffic and revenue were abnormally contracted by business depression. All of these causes were entirely independent of the new legislation, viewed from the standpoint of its permanent significance. The deficits of the first six months (including the burden of the wage increases from May 1, to September 1) were covered by the government guaranty, which had been deemed necessary in order to steer the railroads safely through the period of transition. While the power of taxation was thus utilized to contribute to transportation revenues, the financial burden of the public as a whole was no greater than it would have been if sufficient revenue had been forthcoming through increased transportation charges. In any event, the arrangements of the transitional period may be regarded as an unavoidable heritage of the war experience. The switchmen's strikes of April, 1920, were due to unsatisfied wage demands which had been pending from January, 1919, and were likewise an outgrowth of the Federal Control period. If the labor machinery of the Transportation Act had been organized immediately, these strikes might have been averted. Nor can the sharp decline in traffic which began in November, 1920, and resulted in net operating deficits during the first two months of 1921, justly be attributed to excessive charges made necessary by

the rate provisions of the new legislation. While the tariffs were probably as high as the traffic could bear, and may have reduced tonnage in some measure, the primary cause of the decline must be sought in the depressing influence of the general business situation. Railroad traffic and transportation revenue did not begin to fall off seriously until two months after the new schedules had become effective. During September and October traffic was not discouraged by the advanced rates. During these two months the carriers earned a net operating income in excess of $75,000,000 and $86,000,000 respectively. In October the ton mileage was the greatest ever recorded for a single month of railway operation; and the aggregate ton mileage for August, September, and October was greater than for any similar period of the past. The number of passengers carried between September 1, 1920, and January 1, 1921, actually increased over the corresponding period of 1919 (570,149,000 as against 493,249,259), although the number of passenger miles was slightly less (15.1 billion as against 15.5 billion), resulting in a smaller percentage increase in passenger revenue than in passenger charges. It appears, therefore, that the shrinkage in railroad income at the end of 1920 and early in 1921 was due, for the most part, to the decline in industrial activity, rather than to a failure of the Interstate Commerce Commission (in adjusting rates so as to yield the fair return required by the Transportation Act) to give due consideration to the probable effect of the new rate level upon the volume of traffic, or to any inherent impossibility of so doing.

The real shortcomings of the settlement incorporated in the Transportation Act are more permanent in character. The most important of them consists in the failure to adopt the policy of compulsory consolidation. Unification of the railroad systems affords the most effective means of securing operating efficiency and economy of management. Transportation facilities would be more fully utilized, and inadequacy of equipment and congestion of freight more readily minimized. The need

of extensive emergency powers over "car service" would become less urgent, and occasions for their exercise would arise less frequently. The carriers themselves, free from interference with operating details by public authority, would thus be enabled to accomplish the purposes toward which the emergency powers of the Commission are directed. Temporary cooperative arrangements, under public supervision, are not as effective in improving the transportation service or in reducing its cost as actual consolidation (for they constitute remedial rather than preventive measures), nor do they facilitate the solution of the troublesome problem of the weak roads. Only through the absorption of the financially weak roads by their stronger rivals, can the tasks of rate regulation be satisfactorily performed (without imposing an excessive burden upon the public or subjecting some of the carriers to the difficulties arising from insufficient revenue), and the credit of the roads as a whole adequately maintained. The device of providing for public disposition of excess earnings does not go to the root of the matter; it is rendered necessary by the maintenance of the system of multiple corporate ownership of competing lines. In a period of industrial depression the excess earnings provisions are wholly inoperative. The financial difficulties of the stronger roads are accompanied by hopeless embarrassment for their weaker competitors. The Interstate Commerce Commission is now formulating a plan of consolidation under the terms of the Transportation Act. Unless the acceptance of the plan, after full hearing and all necessary modification, is made compulsory upon the carriers, the reduction of the number of independent railroad corporations and the achievement of a reasonable measure of operating unity are likely to be long delayed. The public would thus be deprived of the benefits of the most far-reaching change looking to the permanent betterment of the railroad situation.

The new rate provisions also require further elaboration. In so far as the statutory rule of rate-making directs the Commission to provide such a "fair return" as will enable the car-

riers to finance their requirements (by giving due consideration to the transportation needs of the country and the necessity of enlarging facilities in order to provide adequate transportation), it embodies adequately one of the essential elements of sound financial regulation. But the question of "fair value"—the base upon which the fair return is to be computed —is still left to ultimate judicial determination. There is no legislative enunciation of what shall constitute the lawful standard of valuation. In view of the approaching completion by the Interstate Commerce Commission of its valuation of railroad properties, Congress wisely left this matter, for the time being, to the discretion of the Commission, subject, of course, to judicial review. In the rate advance case of 1920, the carriers requested the acceptance of "book cost." They contended that, however unreliable book costs may be in case of specific carriers, the aggregate value of the property of the carriers in each group "is substantially in excess of the aggregate of the amounts shown as their respective book costs." Since the Commission had been directed to give to the property investment account of the carriers "only that consideration which under the law it is entitled to in establishing values for rate-making purposes," its decision was based upon the entire record, and the claims of the carriers were scaled down, for the purposes of the particular case, from a total of more than $20,000,000,000 to $18,900,000,000. The necessity of granting the rate advances without delay prevented the Commission from undertaking any elaborate investigation of the relationship between book cost and "fair value," and the real basis of the Commission's determination was not disclosed. No advance was made, therefore, in the development of the "fair value" concept. But the value of the railroad properties must be definitively established. Whatever standard may be accepted as to the past, subsequent additions to this valuation should reflect only actual investment, honestly and prudently made. When the Commission's valuation is completed, an opportunity will be available for some such definition of "fair value."

Unless the Transportation Act is amended in this way, the return to which the carriers are entitled (in the form of revenue that may be applied as interest and dividends on their securities) will remain uncertain, and the extent of the financial burden which may be imposed upon the public will continue to vary with the elasticity of the value base, as influenced by the development of the cost of reproduction method. It is desirable that the "fair return" should be responsive to the changing status of railroad credit and of the money market, and should provide recognition for exceptional skill and efficiency. Hence the *rate of return* should be flexible. But the acceptance of appreciation of railroad "values" independently of capital investment or of operating efficiency, is not necessary to protect the legitimate claims of the owners of railroad securities, and infringes upon the equities of the public in the railroad industry. If public policy as to profit limitation is to be determined by legislative authority, then the standard of "fair value" must be explicitly defined; and if the financial return of the carriers is to be limited to such amount only as will support railroad credit, then actual investment, honestly and prudently made, must be accepted, at least for the future, as the standard of such "fair value."

Finally, further expansion of the machinery of regulation is necessary. The increase of the membership of the Interstate Commerce Commission from nine to eleven does not provide sufficient relief even from the mere mass of responsibilities with which it is charged. With the extension of federal authority (rendering it practically exclusive) to security issues, consolidations, and service, the continuous tasks of the Commission are so numerous and diverse that it is virtually impossible for it to perform them promptly and effectively. But there is also a functional need of supplementary machinery. While primary authority in railroad regulation must be centralized in the national government, there is danger of unreasonable standardization of practice and undue neglect of local needs. Moreover, the existence of state commissions necessi-

tates the development of practical means of coöperation between them and the Interstate Commerce Commission, if the efforts of the federal agency are not to be constantly hampered or completely thwarted. The difficulties encountered in securing the acceptance of the rate advances of 1920 in connection with intrastate traffic provide concrete illustration of the nature of the problem. In like manner, the issues raised in the dispute over the abrogation of the national agreements as to working conditions disclose the character of the conflict between national and local needs in the unfolding of the regulative process. The creation of regional commissions, composed of representatives from the states affected by their jurisdiction, and acting as supervisory bodies of first instance in subordination to the Interstate Commerce Commission, would provide machinery of coöperation between the nation and the states, and would facilitate the difficult adjustment between the common needs of the transportation system as a whole and the special demands of particular sections of the country. Both rate control and the supervision of labor relationships would be rendered more effective through the assistance of such regional commissions. Governmental authority would still be delimited on a functional rather than on a territorial basis, but the regional commissions could serve as intermediaries between the federal tribunal and the local agencies.

§3. *The Constructive Features of the Adjustment*

In spite of these shortcomings, however, it must be recognized that the Transportation Act has made notable advances in the system of railroad regulation. Many of its important provisions justify the characterization that it is "radically constructive." The description of its chief stipulations, presented in the preceding chapter, indicates, in the light of the traditional public approach toward the adjustment of railroad relationships and our previous discussion of the essentials of recon-

structive policy, the changed spirit in which the American railroad problem was conceived by the framers of the new legislation. It will be sufficient, therefore, merely to direct attention to the more significant features of the adjustment.

First, and most important, the Transportation Act places a new emphasis upon railroad service. The negative purpose of protecting the shipper against abuse through the prevention of unreasonable and discriminatory charges has been transformed into a positive effort to provide adequate service and facilities. This change of attitude is manifest in the statutory rule of rate-making, whereby the Interstate Commerce Commission is directed, in adjusting railroad charges, to provide a fair return to the carriers, giving due consideration to the transportation needs of the country and to the necessity of enlarging facilities in order to provide adequate service. Through the support of railroad credit, extensions and improvements will be rendered financially feasible, and the necessary basis established for a progressive transportation service. But there are also numerous provisions designed to encourage, and compel, if necessary, more efficient utilization of existing plant and equipment. The legalization of pooling, and of the control of one carrier by another, under the supervision of the Commission, removes the restrictions against coöperative arrangements. The provisions concerning consolidation, though voluntary in character, constitute a clear departure from the traditional policy of enforced competition. At least preliminary steps are taken toward the ultimate merger of railway lines into a limited number of transportation systems. The need of operating unity is clearly recognized. The Commission's authority over extensions and abandonments will further assist in the development of a service responsive to public needs. Its new powers over "car service"—including the right to order the acquisition of equipment—and its authority to require the joint use of terminal facilities attack the question of railroad service through methods short of formal unification. Finally, the emergency powers of the

Commission—to suspend existing regulations, prescribe co-operative arrangements in the use of facilities, determine traffic priorities, control routing, and distribute shipments—many of which were used with success to relieve the traffic congestion resulting from the switchmen's strikes in April, 1920, are as extensive as they are revolutionary (under peace conditions), and disclose very strikingly the new responsibilities assumed by the public authorities for the satisfactory functioning of the industry.

The financial provisions of the act undertake to safeguard constructively both the rights of the carriers and the interests of the public: to rehabilitate railroad credit, without imposing an unnecessary burden upon the public. As a basis for the limitation of financial return, security issues and capital expenditures are made subject to exclusive federal regulation. The necessity of supporting railroad credit through provision of adequate transportation revenue is then accorded explicit recognition. The powers of the Commission are not confined to the prevention of monopolistic gain through the maintenance of reasonable rates (the rights of the carriers to be safeguarded exclusively through judicial protection against confiscation). The Commission is directed so to adjust transportation charges as to provide a fair return on the value of the railroad properties, and in so doing to take into account the needs of the transportation service. This authority appears to have been freed from interference by the states, federal power over rates being dominant even in the absence of discrimination in the narrower sense. The Commission is thus charged with a positive responsibility toward the carriers. It becomes its express duty to relinquish the so-called "restrictive rate policy" of the past. There is no actual "guaranty" of a fair return, however, since there is no obligation on the part of the Government to pay out of the public treasury any discrepancy which may arise between what constitutes a fair return and the sums realized through transportation revenue. Moreover, the fair return to be provided through the adjustment of railroad rates

is not applicable to any specific carrier, but to the railroads as a whole, or in rate groups. Hence excess earnings are bound to be realized by the stronger roads. While the provisions for the disposition of these excess earnings were primarily intended to solve the strong and weak road problem—so that uniform rates may be prescribed for competing lines of varying financial condition—they involve a striking limitation upon the private rights of the carriers. Only one-half of these excess earnings may be retained by the roads (even this amount must be placed in a reserve fund and utilized only for specified purposes); the other half must be paid to the Government, to be utilized for the support of the transportation service as a whole. There is, in these provisions, a clear recognition of the unity of the railroad service, and of the public character of the transportation function. Multiple corporate ownership is continued, but without exclusive corporate control of the fruits of operation. A more liberal rate policy is contemplated, but its chief end is to strengthen the credit of the carriers as a whole, rather than to enhance the income of particular roads. Private rights are extended only in so far as deemed necessary for the promotion of the public interest.

Although the labor provisions of the Transportation Act provide only for the voluntary submission of disputes to governmental authority, and rely exclusively upon public opinion for the enforcement of such decisions as may be rendered, they constitute a significant advance upon the pre-war situation. The very fact of the existence of a permanent and informed body like the Railroad Labor Board will minimize the danger of disrupted service through open conflict. In failing to provide for labor representation on the directorates of the carriers, and thereby granting to railroad employees a measure of participation in industrial control, the new legislation neglected an adjustment that might have served to avert many controversies which arise out of mere misunderstanding. Its failure, furthermore, to make the establishment of local adjustment boards compulsory (with power of appeal to the Labor Board),

has burdened the national body unduly, and has created a tendency to unreasonable standardization. But the Board has made a very promising beginning. The far-reaching disputes as to wage schedules and the continuance of the national agreements were disposed of with courage, intelligence, and a keen appreciation of the paramount public interest in all important labor controversies. Machinery is now available for the administration of justice in labor relationships. Moreover, a code is being gradually developed for the definition of the basic rights of labor. The "relevant considerations" enacted by Congress for the guidance of the Labor Board in the adjustment of wages, together with the "principles" set forth by the Board itself for the guidance of the roads and the labor organizations in the formulation of new working rules, provide a helpful foundation for the development of equitable wage scales and conditions of employment. With reasonable recognition by both parties of the public status of the transportation industry, and with the exercise of due restraint by the managements and the men, there need be no serious obstacles to the settlement of railroad labor disputes.

§4. *The Crucial Test of the Regulative Method*

It is generally agreed that private ownership and operation is now being subjected to final trial. In spite of the strong American sentiment against collective economic enterprise, it is becoming the consensus of opinion that, unless the carriers, after a reasonable opportunity, prove themselves capable of providing an adequate transportation service, the railroad systems are bound to be nationalized. It is not surprising that such views are held by those who are naturally favorable to public ownership; but the same conclusion is rapidly being accepted by railroad owners and executives, as well as by the critics of private management.

This tendency is very significant. It discloses a practical recognition, quite unconscious in many quarters, that the con-

stantly recurring difficulties of the railroad situation may be due, basically, to the anomalous policy of permitting the public highways to serve as a source of private gain. In other words, the experience of almost a century in the adjustment of railroad relationships is coming to create a conviction that private ownership may be essentially inconsistent with the satisfactory performance of the transportation function. The established dogmas of the natural superiority of private initiative, and of the inherent inefficiency of public effort, in industrial undertakings, are rapidly yielding to the pressure of actual conditions. While the railroad *impasse* of 1921, in spite of the earnest efforts of the Government to adopt a liberal rate policy and to re-establish the credit of the carriers, was due in large measure to the temporary influence of the nation-wide industrial depression, the intelligent observer is being increasingly confronted with the query as to whether the proper maintenance of the transportation system is not fundamentally a national concern, the fruits of which ought to be enjoyed, and the difficulties of which ought to be borne, entirely and directly by the American people. The question of solving the railroad problem satisfactorily is assuming the guise of a challenge to American democracy; and those who persist in retaining their faith in the efficacy of American institutions are loath to admit that our people are incapable of undertaking and administering effectively such a great public enterprise as would be involved in the nationalization of the railroads.

The provision of an adequate transportation machine, under a system of private ownership and operation, involves a very difficult adjustment between private rights and public interests. Railroad plant and equipment and administration must undergo constant development, so that operating technique may be progressively advanced, and ample facilities provided for the growing needs of the country. This involves the provision of such a flow of transportation income as will yield sufficient revenue to support railroad credit, without imposing an undue financial burden upon the public; and such supervision of the

operating activities of the carriers as will encourage efficiency, without undue interference with the details of management. These results cannot be accomplished without an extensive system of public regulation. Operating unity must be stimulated, the acquisition of necessary facilities ordered, and service standards enforced; the relativity of rates must be fixed, and joint charges apportioned; accounting systems must be prescribed, security issues controlled, property valuations determined, and financial returns limited; wages must be adjusted, hours of employment prescribed, working conditions formulated, and labor controversies composed. A long experience has demonstrated that unless these regulative functions are effectively exercised, the public interest is seriously jeopardized; this realization accounts for the intensive development of government regulation. Inadequate regulation would constitute the primary basis of the need of railroad nationalization. But with every approach toward effective public control, there is progressive encroachment upon the independence of the owners and managers of the railroads, and a corresponding destruction of the incentives to private initiative. Financial regulation may become so strict as to remove all attraction for the railroad field from investors; and operating supervision may become so extensive as to render railroad executives powerless to exercise constructive enterprise. Under such circumstances, the demand for nationalization may be pressed as vigorously by the natural supporters of private management as by the foes of our traditional system. Insistence upon the continuance of private ownership and operation, in face of such conditions, would but constitute a stubborn stand for the principle of private enterprise in the abstract, regardless of the realities of the railroad situation.

There is much reason to believe that the American railroad problem is approaching some such status. Both the railroads and the people are finding existing adjustments unsatisfactory. In spite of the thousands of idle cars and the immense surplus of carrying capacity accompanying the industrial depres-

sion of 1920 and 1921, it is generally recognized that railroad plant and equipment are insufficiently developed for the traffic burden normally imposed upon them. In spite of the extremely high level of prevailing transportation charges, the roads are unable to maintain the stability of their securities or the flow of new capital, and in some instances are even incapable of meeting their fixed financial obligations. In spite of increasing efforts in recent years to improve the conditions of the railroad employees, coöperative relationship between the managements and the men is at a very low ebb. These maladjustments are clearly inimical to the general welfare. At the same time the scheme of public regulation has become so extended as to touch very intimately many of the distinctive tasks of management. The Government is now clothed with authority, in case of necessity, to order the utilization of railroad plant, equipment, and facilities, irrespective of ownership, in the interest of common transportation needs; to control traffic and re-route shipments in order to prevent congestion; to supervise building programs, to arrange consolidations, and to regulate security issues and capital expenditures; to restrict transportation revenue to a reasonable return, and to recapture part of all excess earning for the public benefit; to adjust controversies as to wages, hours, and working conditions, and thereby virtually to prescribe a predominating element of the operating expenses of the carriers.

It is very questionable, therefore, whether relief can be expected through further extension of the scope of regulation. The continuance of private ownership must be accompanied by a reasonable degree of independence in management. Primary responsibility for operating efficiency must be centered either in the Government or in the railroads. The tendency of recent developments has been to deny the public the full advantage of either vigorous private enterprise or responsible public effort. Paradoxical as it may seem, therefore, the permanence of the existing adjustment may depend very largely

upon the absence of necessity for utilizing the more stringent provisions of the Transportation Act.

If the carriers, for example, will voluntarily subordinate their private rights in railroad plant and equipment to general transportation needs, the danger of congestion, as business expands, will tend to be eliminated; but if the Interstate Commerce Commission, because of traffic emergency, is repeatedly compelled to resort to its extraordinary powers over service and facilities, the managerial independence of the roads will be seriously undermined. And unless the railroads accept the plan of consolidation now being formulated by the Commission, it will doubtless be deemed essential to render the extensive emergency powers over traffic and "car service" continuously applicable, in order to secure the benefits of informal operating unity. Such developments must ultimately bring public ownership. Similarly, unless the traditional public confidence in the efficiency of private enterprise is clearly justified by the carriers (through such reorganization of administrative control, operating practice, methods of property maintenance, purchasing policies, fuel utilization, etc., as will result in substantial economies of management), the rate features of the new law may fail either to protect the public against exorbitant charges or to support the credit of the roads against inadequate revenues. Under conditions of inefficiency, even a "restrictive" rate policy may be too liberal; and a "liberal" rate policy may prove futile. Private management will neither desire, nor find it possible, to continue, in face of serious financial embarrassment. In like manner, unless the railroads and their employees show themselves capable of settling most of their differences through private conference, the powers of the Railroad Labor Board will be found insufficient to cope with constantly recurring emergencies, and the authority of this agency of voluntary conciliation will, in the public interest, have to be made mandatory. But the imposition of compulsory adjustments of labor relationships—because such adjustments would involve public dictation of managerial policy and governmental denial of

labor's "rights"—would tend to bring the railroads another step nearer to nationalization.

The mere expansion of regulatory principles, therefore, and the mere development of administrative machinery, cannot be relied upon to solve the American railroad problem. Only a sincere recognition of the public character of the railroad industry by the railroads and their employees, and an intelligent perception by the Government of the necessity of conserving the incentives to efficiency and removing the obstacles to initiative, can save our system of private ownership and operation. The carriers must demonstrate in practice that they are consciously performing a public function. This means that they must willingly submit to a limitation of financial return, and recognize their trusteeship of excess earnings; that they must withdraw such opposition to coöperative arrangements as is grounded merely in their individual interests; that they must realize their public responsibility in the matter of operating efficiency; that they must subordinate their private claims to the general interest in the adjustment of labor relationships. Similarly, the transportation workers must definitely accept the necessity of curtailing their absolute freedom of action in the railroad industry. Railroad labor, as well as railroad capital, because of the public purposes to which it is devoted, must submit to limitations which may be unnecessary in ordinary private enterprise. In the long run, the railroad employees, however strong their organizations, will not further their ends by subjecting the common welfare to the mercy of their power to interrupt the transportation service. Unless they assume responsibility to the public, they will forfeit the good-will and support of the public. Finally, due restraint being exercised by the carriers and their employees, there must come a clear recognition by the people and their political representatives that private ownership cannot be maintained unless railroad investment is adequately protected against confiscation, and sufficient transportation revenue is made available to attract new capital for necessary extensions and improvements;

and that private operation cannot be made to yield the fruits of constructive initiative and vigorous administration unless public interference with the tasks of management is reduced to a minimum.

The regulative method, as well as corporate ownership and private operation, is now undergoing its crucial test.

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